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ABSTRACT

Papers from three conferences on applied linguistics include the following: "Evaluating Language Success in an Irish Context" (D. P. O Baoill); "Facilitation of Language Development in the Deaf Child" (M. Nicholas Griffey, Sr.); "Observations on Thematic Interference Between Irish and English" (M. Filppula); "A Global View of the English Language in Ireland" (J. L. Kallen); "The Achievement of an Irish Population (4-7 Years Old) on Language Tests Standardised in the U.K. and U.S.A." (M. Leahy); "Remediation Within the Language Environment" (D. Walker); "The Acquisition and Usage of Interrogative and Negative Forms by Irish Schoolchildren Learning French" (R. Bennett); "The Development of a Phonetics Laboratory for Use in Linguistic Research" (A. Ni Chasaide); "Error Analysis of Irish Students Learning French" (M. Conrick); "Simplification Procedures in the Input and Output of Second Language Acquisition/Learning" (S. Devitt); "Comhshamhlu Tadhallach" (in Gaelic) (C. Ni Dhomhnaill and G. Colaiste na hOllscoile); "The Effect of Auditory Perceptual Functioning on Acquisition of Phonology" (M. De Monfort Supple, Sr.); "The Trinity College Research Project on Independent Language Learning" (David Little and David Singleton); "Linguistics, How Are You!" (D. P. O Baoill); and "Linguistics and Curriculum Development at Third Level" (David Little). (MSE)

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Réamhrá

Tá lúchair orainn a fhógairt go bhfuil TEANGA II ar an tsaol. Baineann an t-ábhar atá san eagrán seo le trí sheimineár a bhí ag IRAAL le dhá bhliain anuas. Tugadh na páipéir atá i ROINN I ag seimineár a bhí ann ar an 10/3/1979. Cuireadh na cinn atá i ROINN 2 i láthair ag seimineár ar 18/10/1980. Baineann siad sin atá i ROINN 3A agus 3B le seimineár a reáchtáladh ar 7/3/1981. Tá tuilleadh páipéar óna seimineáir sin nach raibh ar fáil againn in am ach cuirfear i gcló iad i dTEANGA III.

An tEagarthóir

Introduction

We are glad to announce the appearance of TEANGA II. The material in this edition is taken from three different seminars held by IRAAL in the last two years. The papers in SECTION I were delivered at a seminar on 7/3/1979. Those in SECTION II were presented at a seminar on 18/10/1980. The papers appearing under SECTION 3A and 3B were given at a seminar held on 7/3/1981. There are a number of papers from the three seminars that hadn't reached us in time for publication in Teanga II. They will be published in TEANGA III.

The Editor

SECTION/ROINN I

Evaluating Language Success in an Irish Context.

Dónall P. Ó Baoill

Institiúid Teangeolaíochta Éireann.

My original idea when I thought of this lecture was to talk basically about testing and what exactly we are testing. As I began, however, to put my ideas down on paper, I thought it might be more beneficial not to talk about testing alone but to talk about what we actually do before we test. We must first of all evaluate and define what we teach before defining proper tests.

I would like now to try and show how we might reasonably evaluate language acquisition or learning in three groups.

- (i) the average L_2 learner,
- (ii) slow learners, and
- (iii) deaf children.

Most of the discussion will be about L_2 learners but towards the end of my talk I will briefly outline the linguistic problems associated with the other two groups. I would also like to try during my lecture to focus on some of the research that is going on in Applied Linguistics and show how some of these ideas might apply to the situation obtaining in Ireland.

The first question I believe we must ask ourselves is what are we testing ? and how is this testing to be carried out. There are two basic areas in which one's linguistic competence could be tested.

- (i) The four basic language skills - comprehension, speaking, reading and writing could be evaluated to see how they have developed in relation to each other and the correlation between them examined.
- (ii) We could also look at what level (if we can define level) of language is actually attained and define what exactly it means "to know" a language.

If we succeed in answering those two major questions, then we might want to ask Whether the answers to these questions lead us to a reanalysis of what is being taught and what we are actually teaching? The major part of what I have to say will be dealing with this reanalysis.

It seems to me that we have here in Ireland as in many other countries a dilemma between written and oral language, the emphasis being almost entirely on the written form. This is especially true of deaf children and necessary because for many of them written language is their language. Why then do we place so much emphasis on the written form in the case of the average L_2 learner? Many factors contribute to this strategy:

- (i) Tradition - it fits well into the Irish situation to continue the tradition of the classics - where one studies texts for comprehension, grammar mostly for translation purposes.
- (ii) Teacher's own fears and incompetence in many spheres of oral language. This lack of competence is due to many influences including the teachers' own schooling and training. The social reality of Irish in Ireland is one of non-usage outside of well defined domains which on

the whole are not very influential in spreading the use of the language. Such domains are curtailed and usually belong to the "inside world" of teaching, the Civil Service etc. and hence have very little influence on what goes on in the outside world in our cities and towns. One would expect that high competence in the oral use of Irish might penetrate or break down the barriers involved. This is not the case however. CLAR in its report in 1975 showed that only 33% of those with very high competence in Irish made use of this advantage in passing Irish onto their children at home. About 5% of the population covered in the report have high competence in the language - which leaves us with only 2% who use Irish frequently/always at home.

- (iii) Writing is easier to evaluate. When one writes something down on paper it is easy to pinpoint errors and faults and to give a score. To evaluate a communicative effort by the same learner(s) is a much more difficult job because of the different dimensions of language etc. involved.
- (iv) The large number of teachers involved in the teaching of Irish. Almost **all** of our teachers of Irish are themselves native speakers of English. They are trained within a system which is not geared to using Irish in normal everyday affairs and so they tend to follow tradition and this creates generations of learners competent in writing and comprehension but most inadequate in communication in a functional manner. Because of the large number of teachers being trained yearly and because of uneven standards attained by them - it seems the unending cycle will continue unless some drastic action is taken at the top by those involved in educational administration.

Let us now look at the four basic skills comprehension, speech, reading and writing and see how they develop in the normal child acquiring L_1 .

First of all you have comprehension of speech and a lot of comprehension before any attempt is made at speaking. The acquisition of reading and writing normally takes place school and usually in that order. In most of the teaching that goes on throughout Ireland it seems that these skills come in the reverse order - writing, reading and then perhaps comprehension of speech. For this reason it seems to me that there is too much emphasis on the content of texts and on texts themselves and their evaluation and not enough emphasis on the oral production of language. This situation has also come about because of the types of examinations that we have. All the teachers have to do is to consult previous examination papers and infer from these an appropriate and variable content to be taught in their classes. The consequences of this approach are most destructive for the different kinds of skills involved because the skills involved in using oral and written language are quite different. I believe strongly that if we don't have oral language as a first priority and consolidate that with actual writing - that we can't show the learner the real connection between the spoken and the written forms of language.

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A good example of the consequences of using written language to the detriment of the spoken form is seen in the following histograms from the Error Analysis on written Irish at present being conducted in I.T.É.

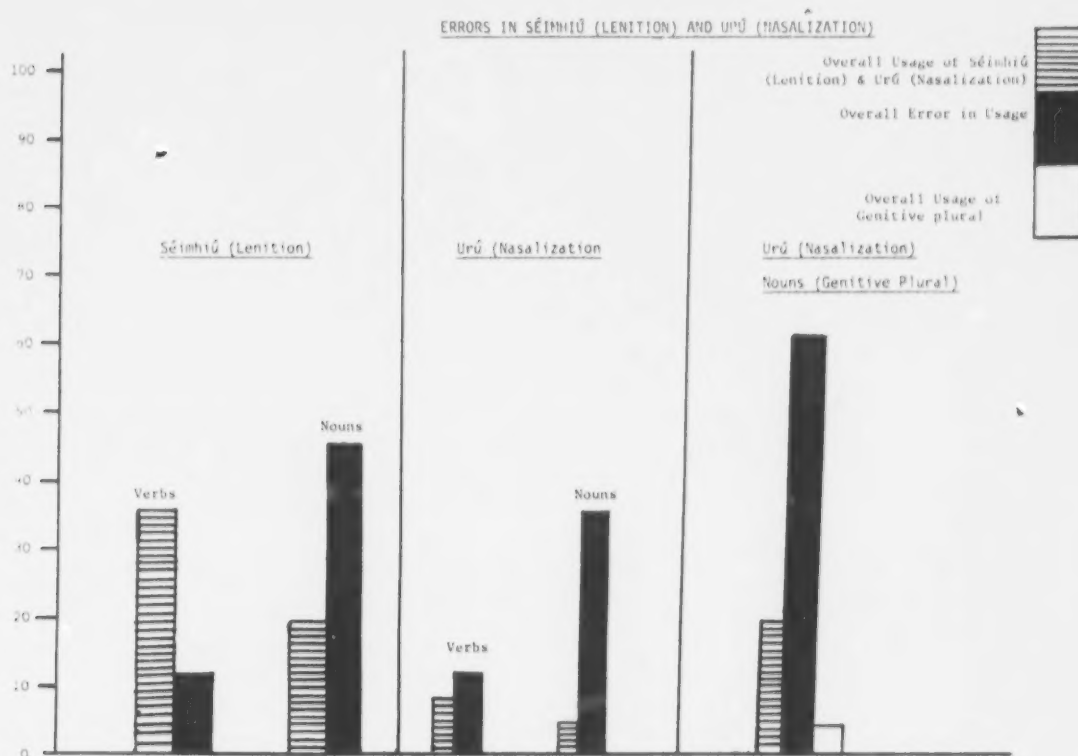


CHART NO. 1

The percentage of errors in the usage of certain categories is hardly better than chance. The use of Urú in the genitive plural is omitted 70% of the time - a very depressing statistic.

Although certain consonants may cause more trouble than others in terms of articulation, it is quite obvious that it is the processes of Séimhiú and Urú as a whole that are creating the difficulties.*

* These processes are usually conditioned by prefixes or preceding particles but not necessarily so, especially in the verbs. The changes which are conditioned by Séimhiú and Urú are summarized in the following tables:

Séimhiú

All stops become fricatives; s → h and f → zero.

Urú

p, t, k → b, d, g and
b, d, g → m, n, ŋ

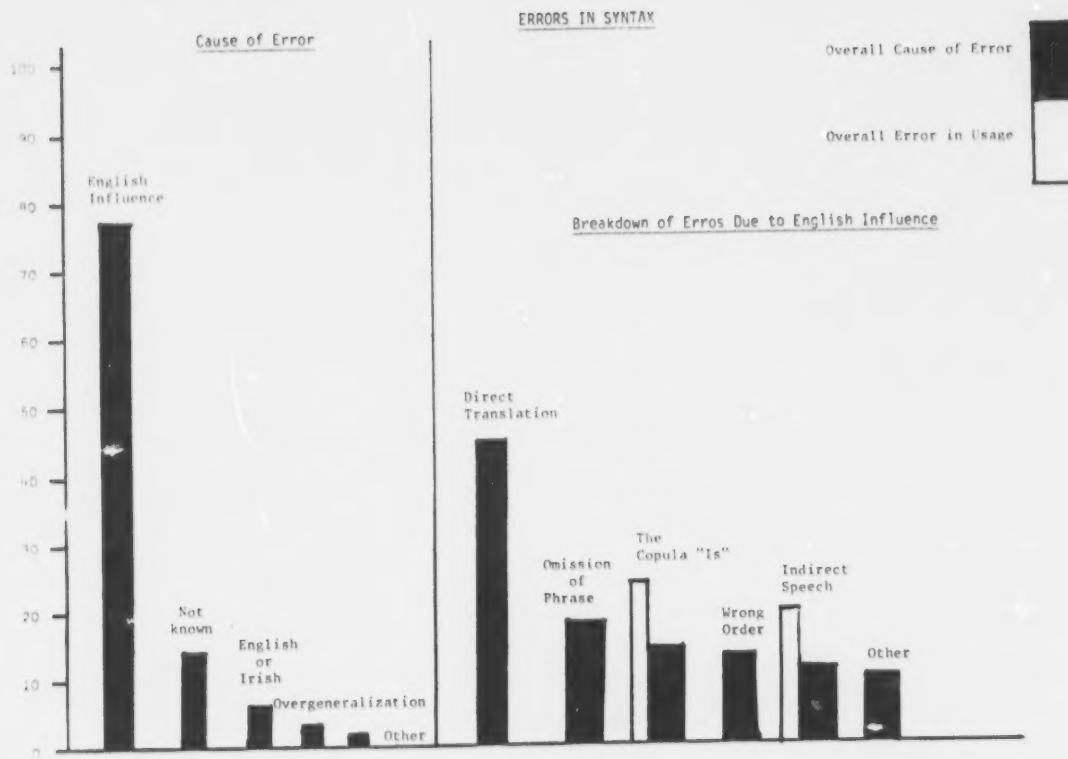


CHART NO. 2

In looking at the errors in syntax we see that the learner is guided more by his knowledge of English structures and semantics and tends to make use of such structures when s/he is unsure of a certain expression in Irish. If writing is this poor we can expect the spoken language to be much worse and recent studies and research bear this out. What then are the conclusions we can draw from such results? I think that we can argue that the oral discussion between teacher and pupil and especially between pupils is of the utmost importance in language learning. This oral discussion is far more useful than the stage of writing and should be an integral part of every language lesson. In this way we would eliminate many error types such as those we have been discussing here. I have no doubt at all but that it is best to

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see the writing as consolidation of the oral stage. As a guiding principle one might suggest that any lesson in which at least half of the time is not given to oral work is a wasted opportunity for learning.

Hamayan et al. (1977) have concluded from their research that (a) learning a second language is more effective when the language is practised and (b) the interaction of the 2nd language among students encourages sociability which may be more beneficial to the 2nd language learning process. This social usage is a particular problem in the case of Irish, because of the social patterns already established, through the use of English.

TESTING:

Before we can test someone we must ask ourselves what we expect of the learner. What does it mean to know a language? What it means in an Irish context is that you must be able to answer questions in writing, mostly. If we want to break this chain of events and help learners use the language, we must aim to encourage students to interact through the new language about things that vitaly concern them, here and now, in the classroom rather than with native speakers in some far away communication in the future. This is an important fact and we must always ask ourselves how likely it is that any of our students will ever visit the Gaeltacht, France etc. and even when they do are they likely to use the language as native speakers do?

Teaching should not in my opinion be defined by the language syllabus the learner should know or find useful, but by his social psychological development as an individual. Should this occur it might restore a central educational role to language teaching in addition to its academic and utilitarian roles. We must also I think reconcile ourselves to the fact that some students above the age of about twelve may never lose their foreign accents. If the learners speech is comprehensible, we should not insist on allophonic or intonational perfection unless the student is planning to teach or to become a radio broadcaster. Heresy! perhaps; but our acceptance of that suggestion would save us and our students endless frustration. Rosalind Mitchell's conclusions in her paper (TEANGA I, 1979) are very interesting with regard to the preceding comments. Her conclusions are based on observations of teachers working in the classroom. She concludes: "The active correction of pronunciation errors is not a centrally important teaching procedure" but "The active correction of grammatical errors is a central activity of foreign language teaching".

This state of affairs - the non-correction of pronunciation and greater emphasis on grammar correction - must affect testing and the evaluation of language. The tests that result will place all the emphasis on grammar and perhaps meaning in the production of spoken language.

However, in Ireland modern languages including Irish are taught in a non-supportive environment, often created by suspicious or hostile attitudes on the part of parents and school administrators, unrealistic expectations on the part of the learners themselves, low value assigned to a knowledge of modern languages by the community, etc. In that learning context it may be that the achievement of even a minimal level of communicative ability serves as potent motivation and is a more suitable objective for the average learner. Indeed, students often recognise active oral production as a central objective in foreign language study, and state a preference for course options that stress it. Though they would scarcely have the opportunity to engage in authentic speech acts Irish second language learners may assign a high surrender

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value to a minimal level of ability in the use of the second language. By granting minimal achievement in the language a high priority at the early stages of instruction, they might be induced to persevere and, in this way, attain greater overall proficiency and knowledge than if oral practice were deferred to more advanced levels.

The syllabus design that underlies the current design for 2nd language materials and classroom practices is totally incompatible with the attainment of communicative ability. Foreign and 2nd language instruction is dominated by the teaching of language structure for its own sake. At the end of the nineteenth century there arose, in reaction to the innovative foreign language teaching approaches stressing the acquisition of functional skills championed by Henry Sweet and F. Gouin among others, emphasis on the teaching of grammar for its own sake. Since then, syllabus design practices have given a central place to structural features of language (phonological, syntactic and lexical). Firstly, the number of features selected for presentation at any level is overwhelming, and far beyond the capabilities of the learners to cognise let alone internalise. Secondly even in materials that adopt a situational format, the situation presented, usually in the form of a dialogue serves primarily as a vehicle for the introduction of grammatical features that will be drilled in a particular unit.

SYLLABUS DESIGN:

In the absence of knowledge about psycholinguistic processes that guide 2nd language learners and about the organisation and structure of speech acts, it is difficult to abandon linguistic features in the design of syllabuses. Four new orientations may be followed that lead more directly to language use than to monolithic and paradigm-oriented linguistic features:

- a) frequency and utility indexes,
- b) intralinguistic analysis,
- c) language acquisition and processing universals and
- d) observation of second language learners.

Many learners of L₂ reach a stage when their use of language becomes fossilised. If this period of fossilisation is extended over a long period - then the motivation to change in the direction of the target language is weakened. This state of affairs creates certain tensions between teacher and learner and the problems that arise are seldom solved satisfactorily. One of the factors that helps the defossilisation programme is some extrinsic motivational aspect - such as gaining entry to certain jobs or to third level educational institutions.

ACQUIRING versus LEARNING L₂:

We must now ask ourselves is what we are doing actually impossible? Is it possible to create 'native speakers' in a language learning environment such as at school? It is highly unlikely that our success rate is going to be very high and this is expected when we consider all the handicaps that the learner of L₂ has to overcome. The student and the adult already possess an effective method of communication and have **already** formed concepts about their environment. They do not hear the 2nd or foreign language continually: for them, learning a second language is usually a collective, part-time activity in artificial surroundings. Their attempts to communicate in the 2nd language are more often than not thwarted by their selfconsciousness, their lack of knowledge or the disapproval of the teacher when they make incorrect responses. They are expected to make fast progress in a language the sounds, structures and concepts of which differ considerably from those of their first language. Although they may have other considerations to spur them on, they have neither the compelling motivation nor the unique situational opportunity of the languageless infant.

The two situations being so dissimilar, it would be unreasonable to suggest that the order in which the child learns his mother tongue should nevertheless be adopted for learning a second language. It may well be that it is the most logical and the most effective method of learning a foreign language but it is equally possible that teenagers and adults learn more rapidly from visual than from aural materials (or from a combination of the two) and that a different order of presentation and a different method of exploitation would therefore be advisable. There is no evidence that one approach is superior to the other.

WHY DO ACQUIRING AND LEARNING DIFFER?

Why do children acquire languages efficiently while adults learn them inefficiently or so it would seem? Let us look at some socio-psychological and neurophysiological factors that are involved.

SOCIO-PSYCHOLOGICAL FACTORS:

Young children, whether they acquire one language or more than one language, enjoy socio-psychological conditions optimally suited to their task. Without these conditions, the biological bases for language acquisition cannot express themselves properly, as can be seen in so called "attic" children who do not have language because of prolonged isolation from human contact. Let us see what the major factors are:

- a) Adults gear their speech to children by pronouncing distinctly, by using simple grammatical structures, by referring to simple and concrete concepts, and by often repeating essential items or whole utterances.
- b) The immediate family members are attentive and indulgent, and provide warm emotional support to children. Children's 'errors' are objects of delight, not of ridicule.
- c) Sentences used with children are disambiguated-they are hardly ever ambiguous.
- d) The language is used continually in their environment.
- e) The language is used by almost everybody that they know.
- f) And last but not most important of all, we must realise that the language(s) they are learning is/are the only means of communication and they must use these languages in everyday activities - asking, arguing, denying etc.

It is impossible, therefore, to have all these optimal and supportive social-psychological factors behind you in learning L₂. So the 2nd language learner is already 'doomed' to fail to a certain degree.

LANGUAGE ACQUISITION - CRITICAL PERIODS:

Not only does a critical period for language acquisition exist, but indeed there may be a series of them. In the earliest period up to age six, the brain rapidly matures while remaining very plastic. In this period most phonetics, simple syntax and (concrete) semantics are established and people who learn their second language before this age are often taken for native speakers, especially in terms of their use of the sounds, intonation and rhythm of L₂. After this period it is more difficult to acquire a nativelike competence in the area of phonology.

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The phonetic system is mastered earliest because it is the most basic yet simplest component of language. There are only twelve to seventy phonemes in any language, and almost all of them have to be put to use in any speech act, allowing them sufficient time for consolidation. At this stage children are incapable of, and have no need of, complex syntax and abstract semantics.

In the next period, between ages seven and nine, the brain is still in the process of maturation, and hence is plastic, though less so than at an earlier age. Even subtle phonological rules are mastered during this period. Such complex syntactic features as passive negatives and embeddings are established, building on the already established basic components. Semantics of course grows continually.

In the third critical period, between ages ten to fourteen (and this is the time at which many of our children begin to learn L₂) a child's syntax is mastered to an adult level. In semantics use and organisation of words based on abstract markers develop up to the age of puberty.

The suggested series of critical periods for L₁ acquisition has implication for L₂ acquisition and learning. A child younger than six is in the first critical period. He has a good chance of acquiring nativelike competence in the phonetics and basic syntax of L₂, including the use of simple grammatical morphemes, because he is still in the process of establishing these components in his L₁. The earliest established component, namely, the phonetic system of L₁, may cause some slight persistent interference as early as age six or seven, but it causes more and more persistent interference as the learner's age increases. Some grammatical morphemes cause subtle but persistent interference perhaps from age nine on. Semantics causes occasional interference mainly in the form of overloaded L₁ words coming to mind instead of L₂ words. Learning abstract semantic markers, for which the critical period ends at a relatively late age, if at all, should not pose difficulties for adults. I think we must bear all these things in mind when we are evaluating the language used by our learners of L₂.

SLOW LEARNERS:

There is another group of important learners about which I would like now to say a few words, namely, the slow learners. They make up about 10-20% (or even higher) of our students, especially in the first three years of the postprimary cycle. Such learners are problematic and the type of curriculum that we have often ignores entirely the problems that they face. The following six characteristics are usually associated with slow learners:

- i) They have difficulty in recognising patterns in language.
- ii) They cannot focus directly on anything - by sight or through listening.
- iii) Their attention is very poor - they are easily disturbed.
- iv) They take a long time to grasp new ideas.
- v) Their's is a short term memory - they tend to get bored very easily.
- vi) Since language is learned bit by bit, they make no headway at all.

It is quite obvious from looking at those six characteristics that slow learners must be given a longer time to master new material and new skills.

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Slow learners should not be excluded from second language learning but their needs may be very different from those of the abler students.

I would like now to argue strongly for an entirely new syllabus for slow learners - as there is a strong case for redefining objectives to meet the pupils' different needs. Clear and limited objectives should produce more satisfactory results in their case.

There is one important fact we should bear in mind about language learning, namely, that a very low correlation if any at all, exists between the comprehension of language and I.Q. Bearing that in mind it seems to me that the main emphasis for the slow learner should be on comprehension of speech and that this skill should be developed to a very high degree. This also points to a non-academic approach to L2 plus reading and a small amount of oral practice. Teaching for them must be cyclic so that certain structures etc. are repeated over and over again. The best way of assessing them is by continuous evaluation and not to have them write everything down - which creates all sorts of extra difficulties. The evaluation should be carried out by their own teachers

EVALUATING THE LANGUAGE OF DEAF CHILDREN:

This is a most difficult job. We can divide deaf children into two groups - those with a hearing loss of 90db or more and those with a hearing loss in the range 50-80 db. The latter group can hear a lot of language with the help of a hearing aid but still have a lot of problems with certain sounds etc. The former group are quite isolated and the amount of language they hear is minimal. They depend entirely on lip-reading for comprehension. Reading is a recording of the oral conversation for deaf children. They can often pronounce words without really understanding what they mean. Deaf children in general have three main problems in using oral language:

- i) Faulty Rhythm which causes 30% of their speech to be incomprehensible. Included in this is the proper use of stress which is so important in English.
- ii) Deletion and epenthesis of sounds which causes changes in rhythm - hence blow becomes below etc.
- iii) Word order and agreement or concord between certain words or parts of a sentence. There is also a problem of semantics especially in verb particle/preposition groups - run off, eat up etc. The use of Tense and Aspect in the verb are extremely difficult for them. To the deaf child in the chair, the chair in seem to be pretty much the same. So why all the emphasis on word order?

There are no reliable tests that are satisfactory for the evaluating the language of deaf children. The tests that do exist are vocabulary and comprehension tests - but because of the poor production of speech by the deaf child and the way in which such tests are scored - I must admit I find such testing most unsatisfactory. What we need are continuous evaluation sheets - filled in by their teachers who understand them and work with them daily.

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So what can we conclude from all this? As I have said if the emphasis is on written language, then obviously our testing is going to be based on the written form. The consequences of this may be quite destructive to the learning of normal communicative oral language. I have also tried to show that acquiring L₁ and learning L₂ may seem parallel in many ways but that a great deal of caution is to be exercised in drawing conclusions about shared similarities. The goals or objectives we set for our learners must be attainable, well graded and realistic - above all the teacher has to recognise the active contribution made by the learner regardless of what the teacher wants him/her to do.

We might, therefore, come to terms with some general principles or guidelines and draw some conclusions from what I have outlined for you based on the most recent research in applied linguistics:

- a) I would suggest language learning should be meaningful and realistic.
- b) Translation, which is often used, is a specialised skill and is inappropriate for the beginning language learner - to rely on as a method of language learning. The problem with it is that it gets harder and harder to throw away the longer you stick with it. If you are reasonably competent in the language then you may find it quite useful for certain purposes.
- c) Language teaching should be done mostly in the target language.
- d) Mimicry and memorisation and drill practice do not teach language - they may sometimes be appropriate for a variety of classroom needs - but generally disfavoured because of their mechanically, meaningless nature, **and their overuse by teachers. They are also boring and stilted.**
- e) The learning of vocabulary should be dealt with in meaningful context. Retention is not required of all items but continuous appropriate usage is to be encouraged.
- f) The first step in any language programme is to find out what the students need to learn and define the courses of instruction and the use of materials with these needs in mind.
- g) Our basic aim should be to make every learner competent to some degree in using communicative everyday language.
- h) I would like also to suggest that language learning will not occur unless the student is able, wants to and makes a personal commitment to learn. No matter how you define motivation, it will be the student's choice and decision that will determine his language learning success.

The expectations of the teachers and the support of the parents will greatly influence that decision.

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LECTURE TO IRALL - 10th March, 1979

St. Patrick's Training College
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"Facilitation of Language Development in the Deaf Child"

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I would like to begin by expressing gratitude to the members of IRAAL who are NOT working in the field of speech and language pathology for the sharing which takes place at these meetings. For many years, teachers of handicapped children; especially teachers of the deaf, had to soldier along in a very difficult field, without help from other disciplines. Happily, this has all changed. My hope, is that what I have to say may be of some little help to those of you who are not concerned mainly with the treatment and education of language handicapped children.

The title of my talk has been chosen with deliberation. It indicates a shift of emphasis in the approach to the development of language in the child who, because of a hearing loss, fails to benefit from the linguistic stimulation in his environment. I use language in the sense of the child's inborn capacity to talk or to learn a mother tongue. As you know, a baby who hears the language with which he is surrounded can, through a combination of pretty complicated physiological, neurological, emotional and social events, learn to understand what is said to him and to speak his native language. The process which takes place very early on in the life of the child is usually automatic. However, when we view it from the standpoint of children who have problems in learning their first language, then we realise that the task is quite a complicated one. We never refer to the TEACHING of a mother tongue to a non-deaf child yet in the history of the education of hearing impaired children we find that the teaching of language has been the main aim of parents and educators alike. Faced with a child who could neither hear nor speak, it was natural for the early educators to turn to the written form of language in order to help those who were utterly dependent on visual impressions. They invented an ingenious and unique system of non-vocal communications by spelling each letter of words on the hand or, as it were, a system of writing in the air, which involved the visual-motor channel rather than the auditory-vocal one. It is significant that this system of manual communication for the deaf was not widely developed until the 18th century. Up to that time, the problem of developing language in the deaf was considered insurmountable. Eventually, most forms of manual communication consisted of finger-spelling and sign language. Looking at the Irish system (1) which has been used here since 1846 - when it was imported from France and modified to reflect English syntax - we find that it consists of:-

1. Natural gestures
2. One hand finger-spelling

3. Methodic or conventional signs which are usually based on the initial letter of a word. These methodic signs include linguistic markers.
4. Signs which are a combination of natural gestures and methodic signs.

When a sign for a particular word is not available, finger-spelling is used. The Irish system of manual communication is systematic, derivative and has a modified linguistic structure. An American linguist - Professor Stokoe of Gallaudet College, Washington D.C. - has noted similarities between it and "Signed English" currently used in the United States (2). This is not surprising because both systems stem from the French form of manual communication. Other early educators of the deaf emphasised the oral form of communication which consists of the use of lipreading or "speechreading" to develop receptive language and speech for expressive language. As in manual communication, the written language was used as a basis. In the teaching of speech an analytical approach or the articulatory method was used. Through the years this structured and programmed method of teaching language was used extensively. The child was taught gestures, finger-spelling, arbitrary signs and writing. He was helped to construct sentences according to a pattern - first in manual communication with or without speech and then in writing. In schools where the pure oral method was used, signs and finger spelling were excluded. The sentence was programmed. It was divorced from conversation and from the experience of the child. Nouns were taught first, then adjectives, verbs, pronouns, active and passive voice as well as a host of conjunctions and relatives. Grammatical terms were taught to seven year olds. Likewise, the approach to speech teaching was analytical - beginning with phonemes which were programmed so that there was a definite order in which they were taught. From phonemes the child progressed to syllables and finally to the utterance of words, phrases and sentences.

When I first entered the field of education of the deaf in Ireland, manual communication was used in the schools. The teaching of language was highly structured with emphasis on the grammar of the traditional linguists (3). We concluded that, by teaching language as we ourselves had learnt a foreign language, our pupils would develop a mother tongue. I had learnt French and Latin from the written form and this was considered a good preparation for the teaching of English to deaf children. At that time instruction began when the deaf child was seven years of age. There was no pre-school guidance for parents. Somehow, it was assumed that ONLY teachers could teach language to a hearing impaired child. In the school great stress was placed on the accuracy of the adult models of sign language. Teachers were expected to be proficient in signing as well as in reading back sign language. It was maintained that inadequate models used by adults constituted an additional handicap for the deaf child. As a young teacher, I was expected to sign in conventional English at all times - the order of the signs being the same as that of the words. It was, however, a great disappointment to me to discover that, among themselves, the children resorted to non-linguistic forms. The language they used was situation linked, crude and pictographic. When accuracy was required the message was written down. (In fact, this is still true in the case of even those deaf people who are expert signers). Stokoe refers to a low and high version of American Sign Language. The same can be said of the Irish system. I must confess that I used the low version when I wanted to get a message across quickly. Of course, I was then re-inforcing patterns which differed considerably from the acoustic language patterns of the environment. I was shattered when I discovered early on in my

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teaching career that my pupils did not always understand when I used correct sentence patterns. They singled out key words - usually nouns - while they failed to grasp the significance of structure words. I very quickly realised that I had to TEACH language.

There is much controversy today concerning the mode of communication best suited to the needs of the hearing impaired. Those who advocate the use of speech accompanied by manual communication or "total communication", as it is now called, maintain that it will enable deaf children to reach higher levels in language. This view is challenged by those who advocate a pure oral/auditory or an auditory/oral approach. While not wishing to dwell on the current controversy, I would like to say that, as a practitioner, I do not support the introduction of supplemental manual communication - be it systematic sign language, finger-spelling or cued speech (which is a manual system related to the phonemic system) - for pre-lingually deaf children as soon as deafness is diagnosed because I believe that perceptions are adversely affected when simultaneous oral and manual presentations are available to children who are developing a mother tongue. Neurologically speaking, it must be extremely difficult for the brain to cope with two quite different systems. If a child is to learn to use spontaneous speech he must be exposed to consistent, meaningful and pervasive rhythmic speech stimulation. His level of attainment will depend on maximum exposure to speech and on early speech production. Like the non-deaf child, the deaf child learns to talk by talking. When using 'total communication' I find that deaf children are more interested in manual communication than in speech signals. This is understandable. Manual communication is more attractive, is seen with comparative ease and is more static than running speech. In the 'total communication' environment, the deaf child tends to neglect the use of any remnants of hearing which he may have, with the result that signs and finger-spelling predominate in his thought processes so that speech is rarely spontaneous and his lip-reading skills are poor. This is a great disadvantage to the deaf person who, unfortunately for him, has to live in a hearing world. Research has clearly shown that deaf adults who speak and lip-read well have a higher professional standing and a wider range of vocational opportunities open to them.

Here I would like to refer briefly to hearing loss so that we may have an understanding of the term "deaf" as I use it. Hearing impairment may be regarded as a continuum ranging from a mild impairment to total deafness. Language and speech development will vary from the practically normal production of the child with the mild hearing loss to the laboured and unnatural speech quality and esoteric language patterns of the profoundly deaf. Even with the use of a hearing aid, the child with high frequency loss will characteristically omit the sibilants and some stop consonants. The child with the loss in the low tones will tend to produce incorrect vowel sounds. In the case of the mildly and moderately hard of hearing, perception of speech by audition may be appropriate; for the hard of hearing with a more severe loss, audition, supplemented by vision or "visual listening" may suffice. For the profoundly deaf, the main avenues for the speech code are vision, sound perception, touch and kinaesthesia. The 90 dB level is critical. Children who are hard of hearing are more auditory than visual. Their hearing loss is above 90 dB. They are "hearing beings" while the deaf are "visual beings". (Recording of filtered speech). I want to concentrate on the deaf because their hearing loss is so great that its implications from the point of view of language learning are hard to grasp. The child with an auditory channel which is almost completely blocked so that the auditory development and comprehension of speech and language, with or without amplification from an early age, are precluded, is one of the greatest educational challenges.

Since World War II, some drastic changes have taken place in the field of the education of the deaf. Because of technological advances we now have more powerful and more efficient hearing aids. Hearing loss in children can be diagnosed in the early months of life and a baby can be fitted with hearing aids in the first year of life so that he is experiencing sound at a time when he is physiologically constituted for the development of a mother tongue. The deaf child will not hear speech but he will receive sound cues which enable him to get information with regard to duration and intensity of speech. He will thus be helped to get rhythmic patterns which are essential for language development. Parent guidance is also available. The guidance is more parent than child-centred because the mother needs help to ensure that the linguistic environment is conducive to the development of language. Language and speech are not separated - speech is now treated as language behaviour. Our primary aim is not to improve speech - at least initially - because we are more interested in the psychological progresses which regulate speech. We are, in fact, facilitating the development of a mother tongue. Findings in the field of psycho-linguistics have helped teachers of the deaf, especially over the past ten to fifteen years. It stands to reason that data from normally hearing children should provide basic information against which the non-communicating child (or the one with deviant language patterns) can be compared. To me, the following factors which find support in psycho-linguistic theory are important if deaf children are to acquire language.

(a) The Quality of Environmental Language

There is sufficient evidence now to show that, if the speech input is right in the case of a deaf baby with intact central nervous system and no additional handicap, he will go through the normal stages of language development though, of course, his progress will be much slower than in the case of the baby with normal hearing.

Whereas in the 1940's we were told to fit children with hearing aids and, "talk, talk, talk" - now we are paying more attention to the quality of the speech stimulation. Recently, professional workers have been emphasising what Bruner (4) has referred to as "inter-subjectivity" between mother and child as an important ingredient in the language acquisition process. Early pre-language interaction is social and affective. It leads to the building-up of a world of attention between parent/child. Mother observes the baby; she follows his attention; she assumes intention on his part as she verbalises. She carries on an endless conversation with the baby who is beginning to talk. There is a circular reaction process at work. Mother stimulates the baby who then responds. The response on the part of the child provides motivation for further stimulation by the mother. A Mother who receives no responses to her stimulation, as is the case when the baby is deaf, is under great stress. She is not likely to persist in interaction unless she receives support and special guidance in the early post-diagnostic period especially. Once deafness is suspected and confirmed the mother may change in her attitude towards the deaf child. This is one of the disastrous results of early profound deafness. Accumulated feelings of tension in parents are often the basis of poor language development in pre-school children. If a deaf child is to make progress, the parents need help to accept him and to provide an environment which will contribute to the development of healthy parent/child relationships. Conversation tends to develop automatically in the case of the non-deaf child but, in the case of the deaf child, it must be consciously developed

by the mother. She uses what Van Uden (5) calls a "seizing method". She follows the child's interest. He makes a gesture "car". The mother responds - "You want to go in the car! Oh, Daddy did not come yet. Let's see. Open the door.....". The child's speech behaviour is shaped by the response of the environment. Helen Keller - who was deaf and blind from the age of eighteen months - was taught in this way by her teacher. Helen writes: "If I did not know the words and idioms necessary to express my thoughts, she supplied them; even suggesting conversation when I was unable to keep up my end of the dialogue". This is very different from the type of identification language which teachers of the deaf used in the past:- "This is a ball.... This is a baloon". Now we are advised to use anticipatory language. We want to teach the word 'car'. We ensure that the child has a toy one. One day we hide it; the child looks for it. Then we can introduce questions such as - "Where is the car", "Is the car upstairs?", "Is Daddy's car outside?". Another way is to advise the mother **to change a daily** routine in the life of the child. Try to explain - "Today we are going to see Granny". Produce a picture. We then wait for a reaction from the child - be it a gesture or a spoken word. A transformation of the child's utterance is then made. "We are going in the car. It is outside....." The same approach is followed in the Nursery class for deaf children. Teachers then keep a written record of conversations with the children. They can be written in comic strip form or in "balloon writing". The written language is more a support to the spoken language. These written conversations help the child who may have short term memory problems. They are intuitively understood by the deaf child as a result of experience which includes oral communication or conversation. To quote from Van Uden - "Only a method of language acquisition can be recognised as psycho-linguistically correct and effective which places conversation and not the sentence, in the centre of the entire didactic activity. The child does not learn language because he receives instruction in its use, but because it is part of his daily life and experience. Talk is the basic form in which language is manifested."

The type of speech patterns used in the environment is also important for the deaf child. We know that normally-hearing children who are learning to talk are exposed to parental language which differs considerably from family to family both in style and amount yet virtually all learn the grammar of their native language easily. McNeill (1966)(6) referred to adult speech, which children have to process, as being a completely random, haphazard sample, in no way contrived to instruct a child in grammar. Since then, several studies have shown that, on the contrary, there is a specific style of speech which is used in addressing young children learning to talk. It is adopted not only by parents but by other adults with little experience of children and even by children as young as five years if they are speaking to children under three. Drach (1969) (7) pointed out that the language everyone uses to young children has shorter, syntactically simpler sentences, a smaller vocabulary and slower delivery than adult to adult speech. It is also more repetative (Kobashiqawa, 1969) (8), more redundant, makes more use of concrete references, less use of pronouns and seems designed to assist the young child in identifying grammatical categories and phrase units within sentences (Snow 1972) (9); Frazer and Roberts - 1975) (10). The recent findings of Howarth (11) in the area of parent/child and teacher/child verbal interactions in the case of deaf children are similar. Formerly, teachers of the deaf and parents used very simple sentences and exaggerated speech patterns in their anxiety to get children to lipread. Now they are encouraged to use the normal adult pattern. It is essential that the rhythm of speech be present

to a marked degree for children who, through their low note hearing, can perceive this important feature. The perception also of intensity as it relates to stress is possible for this type of child. In this way a lip-reader is helped to know the intention of the speaker. A deaf child, in the absence of these cues perceived through sound perception, is not aware, for instance, of the different meanings attached to the following sentences:

Mary will go home on Friday

Mary will go home on Friday

Mary will go home on Friday

Such acoustic information is a great help to the deaf child. The environmental language has a direct bearing, too, on the type of speech production among deaf children because perception and reproduction of speech must be regarded as two processes which are closely linked. All types of hearing impaired children learn to talk by talking as well as by observing the speech movements of adults and siblings. Speech production facilitates the perception of speech when both are trained together. Lipreading, for example, can be well nigh impossible for a deaf person who has never learnt to speak. The deaf child must have constant repetition so that he is able to transfer information gained through residual hearing, vision, vibration-feeling and tactile impressions, into his own speech movements or articulatory acts. He internalises for his own use what he has seen, heard and felt of his own speech movements as well as those in his environment. His parents and teachers act as monitors. Later he becomes dependent on an internalised model - or kinaesthesia - in order to check his production. In the case of the pre-school and nursery-school deaf child, speech acquisition is regarded as a developmental process. The child imitates the speech of his environment. His efforts will be approximate. When fluency has been established, intervention takes the form of isolating defective sounds and perfecting them. The correct form of the sound must be automatic as a result of therapy. As quickly as possible it is replaced in words, otherwise the utterance will be laboured and unnatural because a given speech sound is not represented by a fixed acoustic pattern in a speech wave. Automatic blinding of phonemes which results from practice in speech drill is necessary for intelligibility. By automaticity in articulation the deaf child will achieve a rate of utterance which approximates that of normal speech. There is a correlation between 'quick' speech and intelligibility in the case of the deaf child (12). This is an area where the teacher of the deaf is concerned with the production as distinct from perception. Some teachers, however, do not approve of any kind of intervention as they believe that the speech will be more natural if the child is allowed to make use of available cues rather than concentrate on individual speech sounds. I think that intervention is necessary but the time when it should be introduced depends on the quality of the child's utterances and his hearing loss. In teaching speech to hearing impaired children we realise that the production will deviate from the normal since their problems in perception affect their production. The speech of the child with residual hearing will be intelligible to naive listeners while that of the profoundly deaf will be understood by the family, a particular school, friends and co-workers. Inexperienced listeners will not understand the speech patterns until they become familiar with them. The various studies that have been undertaken since 1940 have shown that poor levels of speech achievement among hearing impaired children are commonplace. The typical errors relate to respiration, phonation and the rate of utterance.

One of the important developments in the field of the education of the deaf which one would like to see in the future is the production of a satisfactory model for the production of intelligible speech. This may be achieved if a developmental approach, coupled with an emphasis on the phonetic level, is used. If, in phonetic practice, the child is enabled to produce sound patterns automatically, then, in phonological speech, conscious attention can be directed to what the child wants to say. With a set purpose in producing speech, rate of utterance, phonation and respiration will be dynamic. I have called this approach "natural intervention", suited to the age level and the speech quality of the child. It will not work, however, without suitable and adequate environmental stimulation from an early age. Frequency of language usage is an essential component of the linguistic environment of a child. It is missing in the case of the deaf child so that steps have to be taken to make up for this serious deprivation. Reading is one of the main ways of compensating. For him, reading of dialogue can make up for the lack of incidental conversation in his life. This type of reading has been referred to as "visualised conversation". For young children it is a reading of a conversation which has been understood and which is related to personal experience. For older children it is a means of entering into conversation with an author.

(b) Discovering the Structure of Language

To me, the most startling change in our approach to teaching language to the deaf is the use of natural methods and the emphasis on the deductive method in order to develop structure. The non-deaf child finds the structure of the language for himself. He discovers the rules. We know this because he often misapplies them. Following a developmental programme with the deaf child, we encourage him to discover structure only when he has established some oral language. The pupil may then be eight or nine years of age so that he is reading and writing. He reads aloud or his teacher reads to him. By this he is helped to find the accent groups. He makes a collection of similar structures. When he is ready to learn the rules by a process of deduction, he is given grammatical terms. This is a far cry from the structured approach referred to earlier. It is based on modern psycholinguistic principles. Yet, as far back as 1879 (13) an Irish teacher of the deaf - Father Thomas McNamara, C.M. wrote the following which I would like to read for you because I am convinced that it is relevant to all language learning.. "I have no hesitation in saying that the system that dispenses with grammar until the children have made considerable way in learning language is preferable to that which mixes up the learning of grammar with the learning of language. Grammar- what is its object? Is it not to regulate the use of language? But, language to be fixed and regulated must already be in existence. It was in this order that we, speaking people, learned language first and grammar after and, if we were required to learn grammar at the same time with language, our progress in the latter would have been very slow if at all possible.

The greater part of mankind dispenses with grammar in the use of language. Either they did not learn grammar at all or, if they did, they forget it. How few are capable of applying the rules of grammar or even would be able to recite the parts of speech? Yet they use language for the ordinary purpose for which it is destined.

We are witness here in Paris of constant examples bearing upon the subject. A family comes to spend a year or two chiefly on account of the young people, that they may learn French in the French capital.

They have a servant or two with them. What occurs? The best teachers are employed for the members of the family, to teach them scientifically according to grammar, whilst the servants are allowed to get on as well as they can amongst the servants of the hotel or the house. A year or two passes over and who are the most expert in speaking French? The young people of the family or the servants; those who are taught scientifically or those who are taught by the mere practice of speaking or, in other words, by the use of the language? Experience is there to give answer and to bear testimony in favour of the servants".

Language Disordered Children

Although my training and experience are mainly in the field of audiology and education of the deaf I am also interested in language disordered children - especially those with a predominantly receptive problem. In 1954 when I was working in a School for the Deaf I discovered that these were children enrolled in the classes who did not respond favourably to teaching methods found to be effective with their peers, despite the fact that there was empirical and clinical evidence to show that their intellectual potential was within normal limits. Their ability to solve environmental problems was as good, if not better, than that of the most successful oral pupils. It was possible to rule out emotional disturbance or lack of stimulation or motivation as primary factors related to their poor achievements in language learning. Faced with this paradoxical situation, a closer analysis of the children's functions was begun in order to determine the most appropriate type of educational treatment for them. This study (14) revealed some of the specific difficulties in the area of perception which are now considered characteristic of this group of neurologically impaired children that have been described as 'language disordered'. In the 1950's however, many questioned the very existence of a developmental language disorder, something that is now internationally recognised as a communication disorder in children.

Language disordered children have two main characteristics which I would like to refer to:-

- (a) Impairments in aspects of auditory perception necessary for language learning.

There is evidence that the child with neurological disorders deals with incoming speech signals in a deviant manner. He cannot listen rapidly. In his case, peripheral deafness is often suspected because of his lack of interest in environmental speech and language. These children behave as if they have a hearing loss yet it is quite obvious that they respond to noise rather than speech. Audiometric evaluation shows three types of children in the group. Those who have normal thresholds for pure tones; those who have an established hearing loss which is usually in the higher frequencies and those who show a marked hearing loss. I have worked with all types. Most of them were wearing hearing aids but, after a period of intense training in listening in slow speech, isolated phonemes, syllables, words and finally sentences, I was satisfied that some of them had normal hearing. Yet they had previously accepted high amplification without showing discomfort, as if they suffered from recruitment of loudness in reverse! We have much to learn about the perceptual behaviour of children with neurological disorders.

- (b) The second characteristic I have noted in language disordered children is defective short term memory for speech. They cannot remember a succession of sounds that make up a word. If we ask them to repeat a series of babble sounds, they cannot do so accurately. Oral dyspraxias are common among them. Their first repetition of a word may be correct but, because of poor memory

span, they do not persist in producing the sounds accurately. Paula Menyuk (15) compared a group of normal children and a group of language disordered children in their ability to repeat sentences. Deviations were found among the latter group and Menyuk speculates that the difference appears to be due to defective memory for speech. She notes that, in some cases, the children repeated one or two words in a sentence - usually the final word or words. This is characteristic of the language disordered child. He forgets the beginning of a sentence by the time the final words are uttered. He appears to listen to every sound and then fails to hold these sounds in memory. He seems unable to anticipate or feed forward as in the case of a normal listener. As a result, he does not acquire language unless he receives intensive training in the phonological, syntactical and semantic aspects of it. If language disordered children are to be helped with the perception and reproduction of speech, they require an analytical approach. Instruction in perception and reproduction of speech begins with isolated phonemes. The child lip-reads, reads, writes, utters and listens to a particular phoneme until he is able to discriminate. Then phonemes are put together to form syllables and, finally words. There seems to be a consensus of opinion now that the language disordered child requires an analytical and highly structured approach. Eventually, the child reaches a stage when he can receive and produce environmental language. I am convinced that the initial exercises are crucial. Many teachers hurry over them because they are unused to such a structured approach. As in the case of the hearing impaired child, early intervention is essential. However, a conclusive diagnosis of a language disorder is usually not made until the child is about four years old. A team approach to diagnosis is essential. The milder forms of the problem are not easily recognised, yet all teachers should be aware of them as pupils who have a problem in learning a mother-tongue may be expected to reach normal levels in a second language with resultant stress for pupils, parents and teachers.

Deaf Children with Multiple Handicaps

Mentally handicapped deaf children and those with additional handicaps such as blindness and cerebral palsy need very special treatment if they are to reach their highest human level. With them, manual communication is used. Some will learn systematic sign language while others - such as the mentally handicapped deaf blind are capable of learning mere signals. In their case, a broad view of language is taken. That is, the sending of messages from one person to another. This includes facial expression, eyepointing, gestures, mime, finger-spelling, sign language, writing, drawing, lip-reading and speech.

Hearing impaired children are individuals whose educational treatment needs to be designed to suit their special communication problems. An individualistic approach by teachers who are well aware of psycho-linguistic principles can help.

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SECTION/ROINN 2

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The language situation in Ireland presents a fascinating field of study from a general linguistic point of view: what happens when two languages come into contact which have, first, a different basic word order (VSO and SVO) and, second, different THEMATIC systems? The two systems are, of course, interdependent to a large extent, as we will see.

By thematic systems I mean the language-specific devices that a speaker may use to organize his utterance as a message, which is syntactically and semantically well-formed and, besides that, appropriate in the given context. A central idea in this kind of pragmatic or functional approach is the division of clauses into "theme" and "rheme". In the definition of these I have adopted a position which originates from a Finnish linguist, Nils Erik Enkvist, and which is fairly close to that of Michael Halliday. A theme is defined as the FIRST part of the clause, extending usually up to the verb.¹ It may consist of a number of "subthemes", which are normally sentence-initial adverbials. A rheme is, quite simply, the rest of the clause in this binary system (Enkvist 1976, 63-4 n.).

Enkvist also makes an important distinction between the concepts theme and "topic", which are often used as synonyms. A topic is a constituent which also occurs at the very beginning of its clause, being preceded only by connectives and conjunctions, which at the same time can be regarded as having been FRONTED from some other, less MARKED, position, and which, finally, does not tolerate any other fronted constituent next to itself.² A clause-final constituent similarly moved to clause-final position would be called a "comment". If there is a topic in a clause, it is considered to be part of the theme (ibid.).

There is one more formal criterion which helps to distinguish between theme and topic: topicalizations, i.e., the fronting operations, never change the SYNTACTIC relations within a clause, as opposed to thematizations and rhematizations, i.e., the operations leading to the choice of theme and of rheme, which may (ibid.). The following examples perhaps clarify the point:

¹ In a VSO language like Irish, the verb is usually the theme.

² Adverbials sometimes present special problems. Here, too, I have followed Enkvist's classification of adverbials into adverbials of "setting" and "valency" adverbials (for discussion, see Enkvist op.cit., 54-6). Another clue is the placement of main sentence stress (which marks the information focus): if it falls on a clause-initial adverbial (excluding the so-called sentence adverbials), we are dealing with adverbial topicalization.

- 1.a. These men built the house.
- 1.b. The house was built by these men.

In 1.b. the thematic structure of the clause has been reversed through a syntactic change (by choosing the passive). This is NOT an instance of topicalization; that occurs in 2.b.:

- 2.a. They were big giants of men in them days.
- 2.b. Big giants of men they were in them days.

Here the difference between a. and b. is not one in the syntactic functions; big giants of men remains the subject complement in b., which is thematically marked.

The functions of the theme-rheme and topic-comment systems are to help to embed a clause or a sentence in its textual and situational context. The theme is often - though not necessarily - "what the sentence is about", and it usually conveys "given" or "known" information. The rhematic part of the sentence often carries "new" information. Topicalization serves such purposes as emphasis, contrast, or the linking of a constituent with the previous text (ibid.).

The thematic systems of Irish and English differ in some crucial respects. First of all, the possibilities of thematization are more restricted in Irish than in English because of its very consistent verb-initial word order. Stenson (1976, 269) notes that Irish lacks most of those thematic movement rules which involve a change in "basic" word order or in syntactic relations within a clause such as Tough Movement, Raising, Dative Movement, There-Insertion, Passive, and Topicalization (in a narrow sense, cf. below), all of which are found in English and other Indo-European languages. Left Dislocation and Extraposition are both possible in Irish, but even they are subject to severe restrictions.

Another striking difference is in the ways in which contrast and emphasis are expressed. Irish again displays some peculiarities not shared by English or most other Indo-European languages. According to Professor Gearóid Mac Eoin (personal communication), Irish does not use sentence stress to convey contrast or emphasis; instead, either word order or certain synthetic particles are employed. Ahlqvist (1977, 274) also points out this special feature of Irish. What is meant by word order arrangements here, is the fronting of the constituent to be contrasted or emphasized, i.e., topicalization. Here, too, Irish has its own restrictions: the rigid VSO order and the consequent pressure of inserting a verbal element even before a fronted constituent has led to a near monopoly of the so-called copula (cleft) construction as the means of topicalization.¹ In compensation, the use of the copula permits the fronting of almost any constituent of a clause, with the notable exception of the finite verb, which would have to be transformed into a verbal noun in order to be clefted. (For a discussion of the limits of the Irish clefting system, see

¹ I will be using the term "topicalization" to cover cleft constructions as well. The stresslessness of the copula is (and of the introductory it is in English) and its frequent omission point to the same basic fronting operation as in "simple" topicalization despite the surface-syntactic differences. It would hardly make sense to consider the copula as the theme of its clause, which would be the case with a "full" verb.

Stenson op.cit., 150-3). In English, topicalization, either with or without clefting, is often blocked by syntactic restrictions unknown in Irish. It is particularly hard to topicalize constituents which have a close bond with the predicate verb, or which belong to certain parts of speech. This is why contrastive or emphatic sentence stress alone, without any change in the word order, is used in English as an important alternative of thematic marking.

A third difference follows directly from the foregoing: in Irish, the THEMATIC part of the clause, the clause-initial field, is the most central and frequently used means of giving emphatic or contrastive colouring (through topicalization), whereas English employs - as it has to - more alternative means. The special role of the thematic field in Irish is also seen in certain clause-types, such as clauses expressing classification, ownership, or identification. These all share the peculiar feature that, in the unmarked case, the NEW information carried by the constituent immediately following the copula PRECEDES the GIVEN information conveyed by the rest of the clause. This is an obvious counterexample to the often cited universal principle (see also Stenson op.cit., 201 n.), and it may have had a certain influence on Hiberno-English.

It is these differences between Irish and English that have provided the theoretical basis for my empirical study of interference phenomena in Hiberno-English (H-E). In order to be better able to document traces of the substratum influence of Irish, I have compared three H-E dialects, those of Kerry, Wicklow, and Dublin.¹ A comparative method was chosen, because not all of the interference phenomena are QUALITATIVE, and even those which are have often a QUANTITATIVE aspect: they may have optional Standard English counterparts, or they may be only seldom used. The quantitative aspect is particularly relevant, since the interfering thematic systems of Irish and English are both structurally and functionally close to each other.

There were four informants from each dialect, their ages varying from 54 to 81 years. None of them had any more than National School education. No questionnaires were used in gathering the corpus, since the aim was to obtain discourse material which was as natural as possible. To further minimize the negative effect of an openly recorded interview, I worked under the pretext of studying the local traditions. The topics of the interview were, however, more or less the same: they included aspects of the personal life of the informant, local affairs, traditions, and views on the future. The lengths of the interviews varied from 25 minutes to 1½ hours, the totals being 4 h 25 min for Kerry, 3 h 45 min for Wicklow, and 2 h 35 min for Dublin.

The criterion for choosing these dialects was the assumed STRENGTH of Irish influence. Kerry, or more exactly the district round Caherdaniel near the Gaeltacht area of Ballinskelligs, represents here the most recent and most direct impact of Irish. All the informants had spent their childhood in a strongly bilingual environment. They still knew some Irish, although it is not spoken there any more. Their first language had always been English. Wicklow, and there the district of

¹ I am indebted to Professor Alan Bliss of University College, Dublin, for his invaluable help in the planning of this project.

Calary, is a place in which Irish died out as early as the mid-eighteenth century. Here the informants had virtually no knowledge of Irish, and three out of the four had not even studied it at school. Dublin, finally, might be assumed to be at the weakest end of the continuum of Irish influence, being most open to the outside world. The informants here, too, had very little or no Irish.

In addition to the H-E dialects mentioned, I have gone through a British English corpus of 2½ hours of length. This was collected by one of my English colleagues, and it consists of the openly recorded interviews of five people whose speech can be taken to represent Educated Standard English. Their ages varied from 40 to 73 years.

In discussing the results of the comparison, I will limit myself to what appears to be the most prominent area of interference, viz., TOPICALIZATION. This includes both cleft constructions and frontings without clefting, as was noted above.

Cleft constructions taken as a whole turned out to be most frequent in the Kerry dialect, which was quite predictable. The relative frequencies have been counted in relation to a time unit, which is here 45 minutes (this being the recording length of one side of the type of tape used, and the most frequent length of interview). One could, of course, count the numbers of tone-groups, or even words, but I do not think that that would change the overall picture. In Table 1 I have given the average frequencies of clefts per speaker per 45 minutes. I have not included the so-called *there*-clefts, nor pseudo-clefts; the former, incidentally, were also most frequent in Kerry.

Kerry	14,8
Wicklow	6,5
Dublin	5,3
British English	2,0

Table 1. Average frequency of clefts per speaker per 45 minutes.

On the basis of the above figures, one cannot discern any significant difference between Wicklow and Dublin, but Kerry English and British English seem to form categories of their own. This, I think, clearly points to the continuing influence of the thematic systems of Irish on Kerry speech, and, to a lesser extent, on H-E in general. Certain qualitative features of H-E clefts, which I will discuss below, provide more evidence towards the same conclusion.

Most of the H-E clefts serve the same functions as in Standard British English. In one type, the focal constituent receives contrastive or emphatic stress, and it usually represents information which is new or contrastive. The *that*-clause, on the other hand, is normally weakly stressed and generally carries information which is either known or knowable from the context. Prince (1978, 896) calls this type the "stressed-focus *it*-cleft". Ex. 3, which is from Kerry speech, illustrates this (for explanation of the transcription symbols used, see the appendix):

3. /since we got our own independence/.../it have died away/ ^ ^
/it is more English/ ^ /they are speaking now/

However, H-E clefts sometimes have qualitatively distinctive features, which in this particular type of cleft is manifested by greater syntactic freedom. The focal constituent may be a subject complement, an adverb of manner, or even (part of) a verb phrase just as in Irish (for a discussion of Standard English restrictions, see Quirk & al. 1972, 952; Emonds 1976, 133). There were very few instances of these in my corpus, but similar observations by Henry (1957, 193) support the existence of these patterns in H-E. In ex. 4 from Wicklow we have part of a periphrastic verb phrase as the focus. This sounded very odd to my two English colleagues, whose intuitive judgments I have relied on here.

4. /ah very little's (i.e., few farmers) give up farming round =
this area/it's looking for more land/ a lot of them are/

Another striking feature is the indifference to the sequence of tenses, which is seen in examples 5 and 6 from Kerry:

5. /I think/this year./this year he bought it/^^
 Q/Isn't it lately he bought that/
 6. /I and my brothers didn't go to America/but all my./
 /all my uncles went to America/I remember/I remember =
 when I going to school/I remember it's three of my uncles =
 went away/ /three of 'm/

The second major category of cleft constructions consists of cases in which, first, there is no implication of contrast, or at most an indirect one, and, second, the that-clause is normally stressed. As to the presuppositions, these clefts differ from the stressed-focus type in that the hearer is not expected to KNOW the information in the that-clause. According to Prince, "the whole point of these sentences is to INFORM the hearer of that very information" (Prince op.cit., 898). Rather more precisely, the function of such a sentence is to present a piece of information as FACT, as something which is commonly accepted and already known to some people, but not yet to the hearer (ibid., 899-900). For this kind of cleft Prince uses the term "informative-presupposition it-cleft". Surprisingly enough, grammarians have almost invariably overlooked this function of clefting.¹ Examples 7 and 8 from Prince (op.cit., 898, 902), and ex. 9 from my Kerry corpus perhaps make the distinction clear:

7. It was just about 50 years ago that Henry Ford gave us the weekend... he decided to establish a 40-hour week, giving his employees two days off instead of one.
 8. But why is the topic so important? Apparently, it is the topic that enables the listener to compute the intended antecedents of each sentence in the paragraph.
 9. /and there's a holy well there'n/ that well was that he./
 /it is there he used bap./ he was a./err he was a monk/a holy man/and it is there he used to baptize the children/

Note that in ex. 9, the focal adverb there does not receive contrastive stress (Prince's examples have been taken from written sources). Prince

¹ Despite occasional borderline cases, the difference in presuppositions is usually clear enough to warrant the distinction.

mentions some other characteristics of this type of cleft, which are also confirmed by my findings: they usually have an anaphoric focus, which is most often an adverbial of setting (defining the place or the time in which the action itself takes place) or a subject noun phrase (op.cit., 899). The focal constituent could be said to act as a kind of MARKED THEME, to which the subsequent bit of new information is attached.

Prince finally notes a tendency for informative-presupposition clefts to occur in formal, often written, discourse (ibid., 899). This receives indirect support from my results, since the instances of these were so few in my BE corpus. On the other hand, the same appears to be true of all kinds of clefts. In H-E, however, informative-presupposition clefts seem to be a characteristic feature of the spoken language. They are, in fact, proportionately more frequent in Kerry than in the other two dialects: well over half of all clefts were of this type there. In Wicklow and Dublin they accounted for about a third of the instances. If this was only an ARCHAIC feature of H-E, one would expect the Kerry and Wicklow figures to be at least a little nearer each other, since in many other respects the Wicklow dialect displays truly archaic features. Therefore, one is inclined to consider the possibility of Irish influence here, too.

The Irish cleft construction has, indeed, a function¹ equivalent to that of the English informative-presupposition clefts. Besides that, it has certain subsidiary functions, in which there is also no implication of contrast. Mac Cana (1973, 110) has observed that sometimes the marked character of a cleft sentence may apply to the total statement rather than to the focal constituent alone. He gives examples like the following, which according to him are extremely common in spoken Irish:

10. Is tú ariamh nár choisg do theangaidh "you never bridled your tongue" (lit. "it's you who never bridled your tongue").
11. Ba é a bhí cosamhail len' athair ar lorg a leicinn "he looked like his father from the side view" or "he was strikingly like his father ..." (lit. "it was he who ...").

(Mac Cana op.cit., 110)

There is a certain element of emphasis in these sentences, but it is not contrastive. A more suitable description would be EMOTIVE or EXPRESSIVE emphasis (Mac Cana, personal communication). Yet another area of usage, in which clefting is widely used without the customary implication of contrast, is RESPONSE-sentences of an explanatory nature (Mac Cana op.cit., 104). Here is Mac Cana's example:

12. "Faoi Dhia, goidé tháinig ort?" ars an t-athair. "Mícheál Rua a bhuaíl mé", ars an mac "In God's name, what happened to you?" asked the father. "Mícheál Rua gave me a beating", said the son (lit. "it was M.R. who ...").

(ibid., 106)

A few more constructions using the copula should be mentioned

¹ This conclusion was reached in discussions with both Professor Mac Eoin and Professor Proinsias Mac Cana. Here, too, Irish has certain oddities which are not important in this context.

whose functions are also closely related to those of the informative-presupposition clefts, viz., *is é rud*, *is amhlaidh* "it is a thing that", "it is a fact that", and *is é an chaoi* "it is how". (For a comprehensive discussion of the different uses of these, see especially Ó Cadhlaigh 1940, 543-556). Reflections of these are sometimes met in Kerry speech in sentences where there is emphatic assertion of a fact (only the first *it is*-clause in ex. 15 is relevant here):

13. /and it is the matter these places are away/underneath the =
ground/ big tunnels/ right/ ^ /under the ground/
14. /it (i.e., a ghost) seemed like to be. in the field/ ^
/in the field where it is the house were/
15. /but./ /'tis more the Irish died since they./since they gave =
that employment because./ ^ /it ~~is~~ all English that's spoken =
there now/

These sentences are not clefts, of course, but more or less direct translations of the corresponding Irish patterns. They were also judged to be clearly nonstandard by my colleagues.

Returning now to H-E, it seems plausible to argue that the greater frequency of informative-presupposition clefts in Kerry speech than elsewhere is due to the analogical influence of the corresponding Irish system, which has, moreover, such widely-used non-contrastive sub-functions as those discussed above. The diversity of functions of clefting in the substratum language has obviously shaped the English language in Ireland so that its SENTENCE RHYTHM has been slightly altered. The general tendency of Irish to prefer the thematic part of the clause for thematic marking is clearly discernible in H-E, particularly in those dialects which have been in close contact with Irish. Henry (op.cit., 195) has observed the same tendency in the dialect of North Roscommon. According to him, a speaker of H-E sometimes uses the cleft construction as a device for presenting the chief burden of his thought (i.e., new information in my terminology) as directly as possible. Some of the HESITATION phenomena found in my corpus lend further support to this assumption. Consider the following examples from Kerry speech:

16. /before the Irish famine/ ^ /in eighteen forty-seven/ ^
/it was mostly./ like Ireland/ Ireland was an./ it was./
/Ireland was a Cath./ a Catholic country/
17. /but it was tw.two./porter was for./ two pence a pint/

These sentences reveal the existence of a conflict between two types of sentence rhythm or thematic organization. The nonstandard tendency is also evident in certain clause-types such as existential there-clauses. In examples 18 and 19, also from Kerry, the "logical" subject has been topicalized through clefting. Here the intuitions of my colleagues differed: one of them did not consider them acceptable, the other accepted them as colloquialisms. In any case, my data suggest that these are more typical of Kerry speech than of the other dialects.

18. /they've died and emigrated and /everything/ ^
/it is all foreigners that'll be here before./ you know/
/after a time/ as far as I can see/
19. /probably it was thatched/ ^ /because it was all./
/it was all thatched houses was here one time/ you know/

Finally, I would add the evidence obtainable from the relative frequencies and the qualitative features of topicalizations WITHOUT CLEFTING. As Table 2 shows, these were also most frequent in Kerry speech. There are no significant differences among the others.

Kerry	10,7
Wicklow	4,2
Dublin	5,3
British English	3,7

Table 2. Average frequency of topicalizations without clefting per speaker per 45 minutes.

A comparison between Kerry and Wicklow suggests again that the higher frequency in the former cannot be explained as archaism alone. Moreover, the Kerry dialect seems to allow itself more syntactic liberties than the other two, let alone British English. The following examples from Kerry sounded more or less odd to my colleagues:

20. /my brother that's over in England/^/when he was./ when he =
was young/^/a story now he told me/ when he was young/
21. /he is working over there/^/in some building he is working/
/with the couple of weeks/
22. /two lorries of them (i.e., turf) now in the year we do burn/

The commonness of such nonstandard or odd topicalizations partially makes up for the admittedly low absolute numbers of occurrences, and it provides one more proof of the influence of the thematic systems of Irish. A bigger corpus might also bring out more clearly the slight tendency of Kerry speech to favour topicalizations of SUBJECT COMPLEMENTS. The differences between the dialects found here are too small to be significant, although intuitively, one would expect that the Irish copula clauses of classification, ownership and identification would have some influence on topicalizations of not only subject complements, but of other constituents as well (cf. above).

All this evidence drawn from spoken H-E indicates the continuing influence of the Irish thematic systems: frequent clefts and simple topicalizations and their qualitative special features underline the importance of the thematic, sentence-initial field. The concomitant change in the distribution of SENTENCE STRESS is one of the factors behind the distinctive Irish "accent", which is most clearly noticeable in those dialects which have been most directly subject to the influence of Irish, although it is not totally lacking in other areas, even in Dublin.

APPENDIX: Explanation of transcription symbols used

/	= tone-group boundaries
/he was./	= phrase discontinued; hesitation
/ =	= tone-group continued in the next line
Q/ /	= question
/it's <u>me</u> /	= normal main sentence stress
/it's <u><u>me</u></u> /	= contrastive or emphatic sentence stress
^ ^ ^	= pauses of different lengths

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A GLOBAL VIEW OF THE ENGLISH LANGUAGE IN IRELAND

Background Discussion

The seminar sponsored by the Irish Association for Applied Linguistics, titled, 'The English Language in Ireland,' represents an important turning point in the study of English in this country. It was not that long ago that a well-known writer on linguistic topics was able to state that

by the little Englishers we are told that the Irish speak, not English but Anglo-Irish; yet many educated and cultured Irishmen speak and write the most admirable, if slightly old-fashioned, English. (Partridge 1951: 65.)

Fortunately, events such as the IRAAL conference show the seriousness with which this field is now taken, and one hopes that this event will be only one of many more gatherings devoted to related topics. During this discussion, I should mention, the term 'Hiberno-English' will be used synonymously with the more cumbersome phrase, 'the English language in Ireland,' without prejudice to the rural/urban distinction between 'Hiberno-English' and 'Anglo-Irish' that is sometimes suggested.

The scope of this paper can perhaps be understood best by looking at the term 'global view.' There are two senses in which this term is especially significant. The common-sense meaning suggests that English in Ireland should be seen in a world-wide context that includes not only other varieties of English (e.g., the English of India, North America, or Australia), but other examples of languages in contact (e.g., pidgin and creole languages as well as bilingual communities such as French Canada or Paraguay). A more specialised definition of 'global' derives from the use of this term in linguistic theory, where, in this case, it would be suggested that the analysis of English in Ireland should (a) examine all facets of grammar, i.e., syntax, phonology, morphology, semantics, and discourse phenomena, and (b) be free to examine data from related areas such as child language acquisition (both deviant and normal), second language learning, historical change, and comparative linguistics. Though this paper is concerned more with the geographical and grammatical sense of 'global' than with the sense referring to related areas lying outside the bounds of grammatical theory, it will at times attempt to sketch some of the ways in which research from areas such as second language learning may also elucidate topics found in the study of Hiberno-English.

From the beginning, one may question why the approach developed in this paper puts particular emphasis on the development of linguistic theory, or is addressed to theoretical arguments with implications greater than the subject of English in Ireland alone. In particular, it could be argued that theoretical arguments would be out of place at a conference sponsored by the Irish Association for Applied Linguistics. The theoretical emphasis chosen in this paper is based on an examination of some of the goals of language study in general, and suggests that a dichotomy between 'applied' and 'theoretical' linguistics is not only misleading but counterproductive to the goals of anyone studying in the field of language, whether one is a Professor of Linguistics or a Second Language Curriculum Development Specialist.

Reason to look briefly at linguistic theory before proceeding with the collection or analysis of data comes from an examination of the goals of linguistic inquiry. King (1969: 13) has summarised approaches to the study of language by denoting three levels of inquiry: 'observational adequacy,' which develops what he terms 'an account that describes a finite corpus of primary data'; 'descriptive adequacy' which provides a grammar 'that gives a correct account of the primary data and of the speaker's tacit knowledge'; and 'explanatory adequacy,' in which 'a linguistic theory (not a grammar) ... provides a principled basis

for the selection of descriptively adequate grammars.'

In the context of the English language in Ireland, this division of goals has direct parallels not only in the work which has so far appeared in public, but in work which remains to be done by those interested in the field. Pure description is an essential to any kind of analysis, and much of the published work on Hiberno-English falls into the category of description. One may look at P.L. Henry's survey (Henry 1958) of English in Ireland and note the optimism with which a nationwide survey of, particularly, rural varieties of English is suggested. Regretfully, such a survey has yet to be undertaken, and the linguistic situation in Ireland has changed to an extent that whatever would be studied today would yield a far different picture from the one which might have been found in 1958. Recording and making available speech samples, designed to provide syntactic and morphological data as well as the more traditional phonological and lexical information, is still a vital part of research that must be done. This type of recording is useful in providing basic and objective data from which other analysts may work; in providing data for purposes of historical comparison, both retrospectively and for future diachronic study; and in providing a cultural record of national attributes which may disappear or be preserved in an era of increasing international contact and exchange.

Yet the goal of linguistic inquiry can never be seen in purely descriptive terms. Even time-honoured techniques such as the use of word lists for phonological elicitation and the plotting of isoglosses, though on the one hand consisting solely of linguistic description, presuppose a theoretical point of view, albeit one which is rarely stated explicitly. Following the completion of some of the classic dialect atlases of British and American English, German, French, etc., Brook (1968: 16), for example, observed that

most dialect speakers today are bilingual or multilingual. We should now try to distinguish the various strands that make up the complicated pattern in the dialect of such speakers... It is well to remember that the older rural dialects are not the only forms of speech that are worthy of study.

Though Brook's observation was not entirely novel even in 1968, Bailey (1973:11) was also compelled to note that

if cross-hatchings of class, sex, age, and other social differences are superimposed on maps of regional variation (for some given combination of social parameters), the traditional notion of dialect becomes hopelessly inadequate and at war with reality.

I would suggest that an analysis of the history of dialect study in most countries shows an interest more in the exotic than in the linguistic, by which is meant that the study of dialect has yet to rid itself of the more popular idea which contrasts a 'dialect' with a 'standard' or 'normal' manner of speech. A survey of literature on the English language in Ireland still shows an emphasis on forms, in syntax, phonology, or whatever, that are felt to be distinctively Irish, seen in contrast to some notion of 'standard English.' What Brook, Bailey, and others working with linguistic variation suggest is an important point with which I will deal specifically in this paper -- that any variety of speech must be seen not simply in contrast to a 'standard' or to any other variety, but both (a) in its own terms as a set of rules which generate the speech corpus of the native speaker, and (b) as one of a set of interrelated rules which may all have an effect on the multidialectal native speaker. The description of any speech variety would not be complete only in noting 'peculiarities of the dialect,' but must also note the way in which particular features that may be of interest are embedded in an overall context of speech in the community and in the individual. I would suggest that an overemphasis on the 'distinctive' aspects of speech in a variety under study implies

erroneously (a) that speakers speak only and always 'in the dialect,' and (b) that non-contrastive relations between 'distinctive' varieties and putative standard or general varieties are not of linguistic interest.

If, as I have suggested, pure description cannot validly be seen to be the only goal of linguistic inquiry, and if, too, any kind of descriptive statement must necessarily be seen in a broader theoretical context, one might well want to suggest a second goal for linguistic inquiry -- the provision of explanations as to why observed phenomena are the way they are. Considering Hiberno-English, three reasons are generally given for explaining the particular characteristics of the variety: (1) historical facts relating to the survival of forms brought to Ireland and subsequently lost or changed in England, (2) the influence on English in Ireland of teachers and others in authority for whom English was not their mother tongue, and (3) the influence of prolonged and varying contact with Irish. (For a concise summary see Bliss (1977), but other authors as well.) Often, it seems sufficient to explain particular features of English in Ireland by recourse to one of the three historical factors above. In a sense, these factors provide a type of 'descriptive adequacy,' in making arguments of the type that 'A given feature X has arisen "under the influence" of Irish, prior historical formation, or perpetuated error by the non-native speaker.'

Yet the approach which I wish to suggest raises a further series of questions which cannot be answered by recourse to the facts of historical development. Linguistic theory requires adequate description, for without data theories cannot be constructed or evaluated. Likewise, empirically verifiable phenomena (e.g., the presence of two languages in one speech community) must be accounted for in formulating linguistic explanations. But the ultimate goal of linguistic inquiry should not be simply the description of speech or the correlation of observable phenomena. Rather, one hopes by analysis to obtain a greater understanding of the human linguistic faculty and ultimately the structure of the human mind. Concomitantly, linguistic study should facilitate the formulation of universal principles of linguistic organisation and behaviour, and suggest a continuous process of refinement of linguistic theory to account for language and the language-mind relationship.

Having said this much, what linguistic theory can one in fact turn to in order to provide the kind of background which might be useful in the study of Hiberno-English? All theory is, by definition, in a state of continuing development, so it would be impossible to point to any one body of literature or the work of any one author and say that a Theory X had been provided by which all further hypotheses could be developed and evaluated. If our linguistic and geographical orientation is to be global, perhaps, then, our theoretical orientation must also be global. Rather than absorb theoretical approaches without evaluating them, though, some choice must be made as to which general approaches show the greatest promise in providing the most probable explanation for the greatest amount of data in the simplest fashion. Generative grammar, by which is not meant 'Transformational Generative Grammar,' provides a starting point in defining language as the outcome of a system of rules, internalised by the native speaker of a language for generating an infinite number of utterances from a finite number of units. This system of rules, which Chomsky (1957) termed 'competence,' is not competence in a normative sense -- speakers do not have greater or lesser degrees of competence, and deviant speakers, whether speakers of a 'dialect' or those in need of speech therapy, do not lack competence but merely generate language by a system of rules which is different from the system used by other speakers. Generative grammar has freed linguistics from positivist requirements which would otherwise require the detailed study of individual utterances without generalisations of any far-reaching type, and which would prevent exploration in the relationship between the structure of language and the structure of the mind. The generative approach constitutes a diversified field still in the process of development, and is not an orthodoxy

which prescribes a narrow set of tools and constructs to the exclusion of all other approaches. While retaining a belief in the importance of a 'global' theoretical view, I would suggest a generative paradigm as a starting point not matched by any other paradigm for its usefulness in guiding research with the aim of establishing universals and exploring the mind-language relationship.

In viewing language as the outcome of rules internalised by native speakers, several claims are made, while others often attached to the basic generative notion are not made. First, not all generative grammars are transformational grammars -- transformations refer to a specific construction in generative grammar, and while transformations may provide the best means to generalise between related utterances (e.g., 'Linguists eat exotic food' and 'Exotic food is eaten by linguists'), they may not be the only generative rules which may do so. Brame (1978), for example, specifically denies the existence of transformations, but is clearly generative in approach, specifying that surface structures must be composed of units required by abstract rules generating grammatical structures and preventing ungrammatical utterances. Generative grammar, then, may have recourse to transformations, but may also write rules describing grammatical competence without using transformations. Second, a generative approach is not to be equated simply with the notion that language is 'creative' or even governed by rules -- generative grammar makes predictions about the types of rules which may be suggested, the formal structure of these rules, and the means by which rules may interact and operate to produce surface utterances. It is an integral part of grammatical theory to favour some analyses over others on a principled basis, and a part of linguistic study to evaluate proposals which may be made concerning rule structure and interaction. The ultimate goal of universal explanation and exploration of the language-mind relationship is always of prime importance.

Given, for the purpose of this paper at least, that generative grammar offers insight into the nature of language in general, can it be of help in the study of the English language in Ireland? The answer at this time must remain a qualified yes. Ó Murchú (1967: 215) observed that

before the development of Transformational Grammar, there was no really efficient technique available for the description of interdialectal variation in syntactical structure.

Generative grammar -- transformational or otherwise -- has seemed to offer a valuable tool for the analysis of language and, hence, linguistic variation. Yet generative grammar has, classically speaking, concerned itself only with data from what Chomsky (1965: 3) termed the 'ideal speaker-listener in a completely homogeneous speech community.' Just as the argument against traditional dialectology rests on the observation that dialects are rarely, if ever, 'pure' in their distribution across geographic and social variables, an argument against the 'ideal speaker-listener' notion can be made by the observation, readily verified empirically, that few, if any, speech communities are linguistically homogeneous. The lack of ideal speech communities in this sense does not invalidate the generative approach to linguistics, but it does suggest that generative grammar may not offer specific tools which are useful in the study of linguistic variation.

The contradiction one faces is thus as follows: on the one hand, generative grammar provides important insights into the operation of language and a valuable means to explore universal principles of linguistic organisation. On the other hand, generativists have yet to provide specific theoretical constructions which may be of direct use in the study of Hiberno-English as a subfield of linguistics. This contradiction is a further reason for suggesting a 'global view' of the problem. A theoretical basis is necessary for inquiry, yet standard linguistic theory does not readily offer a mechanism to account for a situation like that found in Hiberno-English, characterised not only by bilingual contact and

historical isolation from sources of linguistic change in Britain, but by multidialectism brought on by intra- and international travel as well as communication via television, radio, and cinema. A global view would call for the incorporation of explicit theory into empirical research, and for the extension of the limits of standard generative theory into the study of linguistic variation and relations among varieties and languages.

Independence and Dependence in Dialect Relations

Luelsdorff (1975), in a summary of generative work on dialectology, has described what he terms an 'Independence Principle,' in which grammars are constructed without recourse to data from other dialects, and a 'Dependence Principle,' in which dialect forms are related from common underlying forms by a series of rules applicable to individual dialects where appropriate. Conflicting results are obtained in the following analysis. (Luelsdorff 1975: 22-23. Luelsdorff's phonological notation, which is not consistent with other notation in this paper, is retained in this discussion.)

Black English Vernacular (BEV), a type of American English associated with black people of lower socio-economic status, generally shows a lax /I/ before a nasal consonant, where Standard American English shows /E/. The following data illustrate this distribution:

	<u>Std.Am.E.</u>	<u>BEV</u>
'pen'	pEn	pIn
'hem'	hEm	hIm

According to Luelsdorff, the Dependence Principle would require a statement that BEV has a rule in which

$E \longrightarrow I / \text{---} [+nasal]$

i.e., underlying E is realised on the surface as I in the environment preceding a nasal.

An Independence Principle, on the other hand, simply states that BEV has an underlying /I/ where Standard American English has an underlying /E/. Luelsdorff (*ibid.*) ultimately favours the application of the Independence Principle, preferring to conclude 'that there are underlying differences in the phonologies of Standard and Black English.' In preferring the Independence Principle to a Dependence Principle, Luelsdorff (1975: 21) observes that

A sharp distinction should be made between writing grammars underlying the speech behavior of individual speakers (=grammars) and statements relating the grammars of individual speakers (=metagrammars). The goal of the former is the accurate and complete description of the linguistic competence of selected members of the speech community. The goal of the latter is to relate these grammars in an accurate and illuminating way.

The logic of the notion of linguistic competence would seem to argue for an independence principle along the lines suggested by Luelsdorff, perhaps, yet a linguistic theory should, I would suggest, also allow the analyst to make a comparative statement noting correspondence among the grammars of different speakers. A crucial distinction is made, though, in recognising that this comparative statement has no reality as far as competence is concerned -- it does not provide a means to account for the use of language by actual speakers.

To transfer Luelsdorff's suggestions to the case of the English language in Ireland, one would suggest that Hiberno-English cannot be seen primarily in

opposition to other varieties (e.g., 'Standard English' or 'British English') or in opposition to Irish. The following example, from Henry (1977: 33), chosen nearly at random from one of many works which follow a similar approach, illustrates this point. Consider the following 'equivalent' expressions:

(1) Anglo-Irish: 'The bate of him ishn't in it.'

(2) Irish: 'Níl a bhualadh ann.'

(3) Std.E.: 'He has no equal.'

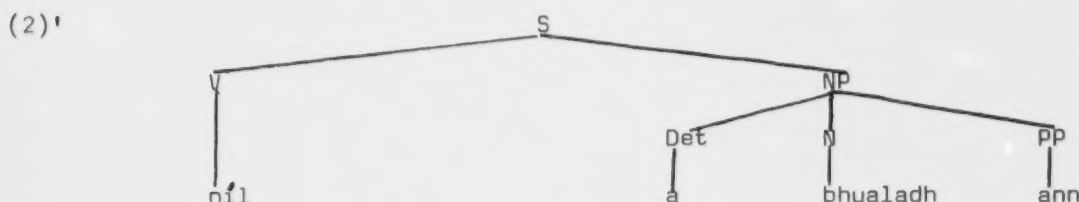
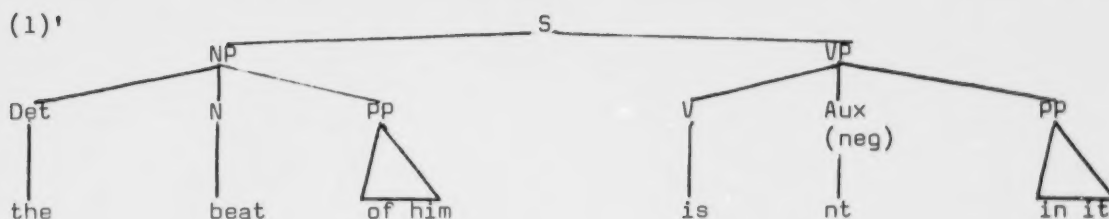
Sentence (1) would safely, I think, be seen as distinctively Irish, specifically the nominal construction 'the beat of him' and the prepositional 'in it.' A generally accepted explanation for a sentence such as (1) would be that it is derived 'under the influence of Irish,' comparing (in (2)), the nominal 'a bhualadh,' literally 'his beat,' and suggesting that the Irish preposition 'ann' would be translated as 'in it.' Sentence (3) is seen in marked contrast.

This picture of the influence of Irish, however, may run counter to the fundamental concern of linguistics with the competence of the native speaker. It is logically impossible to suggest that a speaker using Hiberno-English who does not speak Irish with a fluency liable to create synchronic interference is in fact acting under the influence of Irish. Historically, it may be true that phrases and translations or calques may come into one language from another as part of the language contact situation, yet what is equally significant is not the historical source of the construction, but its synchronic status. For a borrowing to survive in a language or to extend itself beyond the bilingual community (which a phrase like 'in it' has clearly done), it must be interpreted by speakers as being an integral part of their own competence. What the analyst then seeks to look for is the specific structure and rule-derivation of all surface structures, without recourse to the structures of other languages or historically related forms. Lightfoot (1979: 148), in a discussion based in part on the work of Andersen (1973), illustrates the relationships among grammars in the language acquisition process and historical change as below:



In other words, the grammar of a language at a given time (G_1) serves as an input for the linguistic output only at the given time (O_1). This output (O_1), not the grammar (G_1), serves as the input for the construction of grammar at the next stage (G_2). This grammar (G_2), but neither (G_1) nor (O_1), serves as the input for the output (O_2). Neither the grammar nor the surface structure of the earlier stage underlies the output of the later stage -- only the synchronic grammar of the appropriate stage underlies speech. By extension, in Hiberno-English, neither the grammar nor the surface structures of Irish would underlie Hiberno-English except in cases, possibly, of synchronic bilingual interference. The 'influence of Irish' is to be seen in the way that Irish surface structures may have affected the structure of the underlying Hiberno-English grammar.

The above argument -- for separating the competence of the native speaker from considerations introduced by other languages or historically related forms -- is an overall theoretical consideration with specific relevance to the Irish case. A second argument in favour of an English-based analysis of Sentence (1) is found by looking at the specific structures involved in this example. Consider the following tree diagrams of (1) and (2):

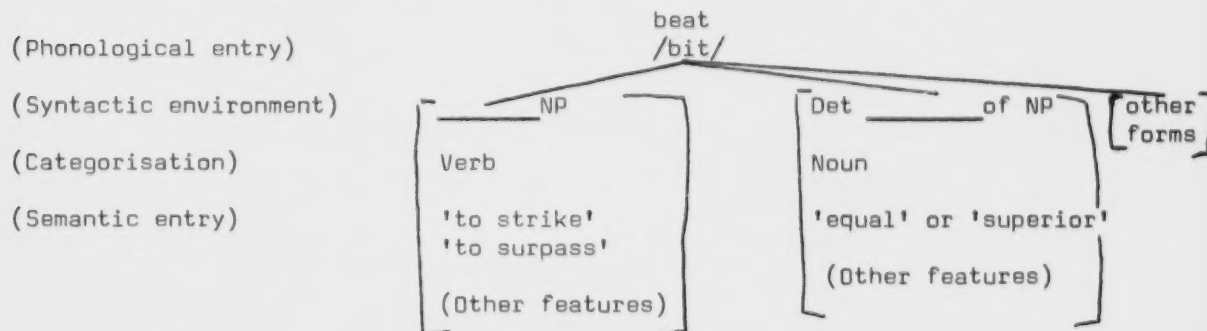


Clearly, (1) is a sentence of English, while (2) is not. Structural parallels to (1) abound in English, e.g., (4) 'A picture of him isn't in the book,' (5) 'The likes of him aren't in Chicago,' or (6) 'The riches of Croesus aren't in Portumna.' No verb-initial parallels to (2) can be found in English.

The Lexicon and Dialect Differences

Any kind of structural analysis shows examples such as (1) to be cases of English generated, from an abstract point of view, in a relatively non-distinctive fashion. Yet the surface structure of (1) is clearly different from what would be found in other varieties of English, so the question still arises as to how one can account for such differences. In the case discussed here, recourse can be made to the lexicon as defined in the generative model. In addition to the better-known syntactic and phonological components of generative grammar, there is included also a lexicon, in which units are stored with a phonological representation, a semantic representation, and information concerning the distribution of units in sentences. Though neglected in the early days of generative grammar, the lexicon has become an area of increasing importance, particularly since Chomsky (1965) and as evidenced in collections such as CLS (1978).

Following the model proposed by Hust (1976, 1978), I would propose a branching tree diagram in which the apex contains the phonological, syntactic, and semantic features common to all forms of an entry, while descending branches contain features specific to related but distinct entries, as a lexical means of accounting for examples such as (1). In this example, a lexical entry for 'beat' in Hiberno-English might be the following:



To generate (1), then, a lexical insertion rule in the syntactic component allows for insertion of the second node in the above diagram in the appropriate syntactic environment. This node shares some features with other forms, but is not found in some other varieties of English. A phonological rule converting /i/ to [e] in this and some other Hiberno-English words may then operate.

Further research would be necessary to refine lexical entries such as the one proposed for 'beat' here, but the general approach is one I would suggest. In this analysis, basic structures found in dialects of a language may be relatively consistent, yet alternations in the lexicon may produce surface structures that differ visibly from dialect to dialect and, in a case such as (1), may resemble surface structures of another language.

A similar analysis may hold for the phrase 'in it.' The syntactic structure of any dialect of English allows for the combination 'in it' to occur in some forms, as in, (7) 'I looked him up in the phone book but he wasn't in it,' or (8) 'I'd like to be included in it.' The 'it' of (1), however, differs significantly in that 'it' does not refer to any other NP. Syntactic parallels, in which 'it' can be used with a preposition in a non-anaphoric sense, are to be found in other English constructions as well, e.g., (9) 'We're really up against it now,' or (10) 'Come off it!'. The 'it' of (9) and (10) refers to no specific noun, but functions as a particle in part of a prepositional phrase closely linked to a verb phrase. The function of 'in it' in Hiberno-English is roughly equivalent to what Jackendoff (1977: 79) terms ' "adverbs" without -ly such as here, there, outside, downstairs, beforehand, and afterward.'

The foregoing examples suggest that in language or dialect contact neither base nor surface structures are borrowed from variety to variety. I have suggested thus far that a prime means of interlanguage influence may be found in the organisation of the lexicon -- that changes (1) enter into a dialect or language through the lexicon, and that (2) in some cases lexical changes may be extended through interaction with the syntactic component to alter syntactic structures. Similar processes may occur in the realm of phonology. One syntactic example of extension may be the Irish construction using 'after,' as in (11) 'He is after getting the paper,' or (12) 'She was after her lunch,' in which it may be suggested that 'after' has now acquired the syntactic subcategorisation that allows it to be placed in the main verb or auxiliary phrase, and that a reanalysis of the rules governing verb phrases and their constituents has taken place in such varieties of Hiberno-English. It is unduly complicated and counter to the notion of linguistic competence to explain this use of 'after' via Irish tar eis. Rather, a more comprehensive approach suggests that differences in verbal structure in Hiberno-English are to be found scattered through the lexicon, syntactic component, and semantic component of the grammar.

Non-Grammatical Approaches

A second point which I should like to make in discussing a 'global view' actually leads away from the grammatical analysis proposed thus far. Lightfoot (1979: 405) has called for the analytical separation of 'changes necessitated by various principles of grammar...and those provoked by extra-grammatical factors.' One device which cuts across levels of phonology, syntax, and semantics, and which correlates linguistic variables with non-linguistic variables quantifiable by empirical observation is the 'implicational scale.' As pointed out by Luelsdorff (1975: 18), implicational scales are not statements about individual grammars, but rather a means of comparing individual grammars -- what Luelsdorff terms 'metagrammars.'

The following discussion illustrates the application of implicational scaling, using a scale for Jamaican English developed by DeCamp (1971) and discussed by Luelsdorff (1975: 17-18). Certain critical variables are isolated and assigned plus or minus values, plus values indicating non-inclusion in a 'creolised' variety of English, minus values indicating creole status. The following list is illustrative:

+A child	-A pikni
+B eat	-B nyam
+C θ /t distinction	-C t
+D ∂ /d distinction	-D d

+E granny	-E nana
+F didn't	-F no ben

Each speaker in a speech community is then given a profile of plus and minus values for each variable. Judgments of values may be based on habitual use or judgment of grammaticality by the speaker, depending on the approach taken. Once each speaker has been given a profile, all speakers in the sample are compared for interrelationships, as in the following:

Speaker:	1	+A +B +C	
	2	-A +B -C	
	3	-A +B -C	
	4	-A -B -C	
	5	+A +B +C	, etc.
	6	+A +B -C	
	7	-A +B -C	

The arrangement of different variables across speakers is then shown in an implicational scale, in which those speakers with the greatest co-occurrence of variables are grouped closest to each other, ranging, in the process, from minimal to maximal co-occurrence of 'creole' features. In this example, such a continuum would begin as below:

Variable:	+D	-D+C	-C+A	-A+F	, etc.
Speaker:	5	1	6	2	

This continuum would be interpreted to say that Speaker 5 possessed a plus value for variable D, while all speakers to the right on the scale possessed a minus value. The next speaker, Speaker 1, would share the feature +C with the speaker on the left (Speaker 5), but would have a minus value for D. All other speakers would have minus values for variable C. Speaker 6, then, would have minus values for variables D and C, but a plus value for A. Speakers to the right would have minus values for A, D, and C. Such an ordering can thus show empirically verifiable implications, e.g., if a speaker uses the word 'nyam' (variable B), then the speaker will also use 'pikni,' 'nana,' and other words or features associated with minus values on the list of variables. Such correlations of variables can then be matched with non-linguistic variables such as age, income, social status, etc., to yield a profile of linguistic and non-linguistic relationships. In contrast to the generative approach found in the syntactic example given earlier, implicational scales do not discuss the competence of individual speakers -- rather, they are a device which can be used to note inter-speaker regularities, substituting in a more precise fashion for the cross-speaker empirical data obtained in traditional dialect study.

Such 'metagrammatical' statements may well be necessary in writing adequate explanations of variation phenomena. In studying Hiberno-English, features might be arranged in a scale with implications for identifying an Irish vs. non-Irish continuum of English varieties. Bliss (1976: 21-22), for example, suggests that 'yoke' denoting a thing in general is peculiarly Irish, and that 'gas,' as in 'It was a great gas,' is also not to be found elsewhere. In terms of an implicational scale, 'yoke' might be seen as clearly Irish and widely spread across space and social parameters. 'Gas' in the above sense, though, while not, perhaps, found in England, is found in the U.S. with virtually the same meaning. An implicational scale could reflect that 'gas' is not English, but is shared by at least two 'overseas' varieties of English. Similarly, mention could be made in an implicational scale of the many varieties of English (including many types of Hiberno-English) which have lost a /θ/-/t/ and /ɔ/-/d/ distinction in contact situations. A network of scales relating different clearly defined variables could show important relationships among many more varieties of a single language than is otherwise possible.

Implicational scales could also be developed within Ireland to suggest relationships among different varieties using only Hiberno-English data. Such an approach may present a more realistic picture of the description of the English language in Ireland than discussion in monolithic terms such as 'common Hiberno-English,' 'the Northern isogloss,' or 'the Kerry accent.' A great deal more research will be necessary to establish critical variables and their relations.

Conclusion -- Towards a Global View

From the point of view of linguistic theory, it is not sufficient to stop at the observation that English in Ireland either exhibits certain forms not found in England but found there at an earlier time, or that certain Hiberno-English forms parallel those in Irish. This insufficiency rests on two main grounds: (1) that linguistic description must account for use by a speaker at a given time -- a speaker who has acquired language without knowledge of its history or, quite often, of any other language, and (2) that examples of putative conservatism and bilingual influence are so widespread in the world that a more adequate description of any particular case (e.g., Ireland) might require a theory based on universal tendencies in language spread, isolation, and interaction. To pick out two of many examples, one might look at the case of Jamaican English or South American Spanish. Cassidy and LePage (1961: 19-24), for example, cite many processes in the development of Jamaican English which parallel those discussed by Bliss (1976: 18ff; 1977; 1979) for Hiberno-English, e.g., local innovation, local meanings attached to words used elsewhere with different meaning, the use of items which have died out in other English-speaking areas, and the influence of other languages. In discussing South American Spanish, Blanch (1968) gives a review of arguments concerning the development of various national varieties, centering on theoretical and social controversy concerning the relative importance in the development of 'overseas' varieties of structures in the grammar of Spanish vs. the influence of native languages. Ultimately, Blanch's discussion tends to favour the development and use of Spanish-based and universal explanations over 'substratum' accounts. These and hundreds of similar discussions around the world suggest that a large body of data may await correlation with observations of the Irish experience.

What, then, is a 'global view' of the English language in Ireland as I would define it? I would summarise this perspective with three major points: (1) The intuitions of a native speaker of English or any language must be accounted for by synchronic rules. The 'conservatism' of Hiberno-English may be discussed in a historical treatment, but the synchronic vitality of any variety spoken is of paramount importance for the linguist. Similarly, influence or interference from Irish may account for features in the corpus of a particular individual whose first tongue is Irish and who is learning English as a second language, or in a historical discussion of such individuals, but it is not linguistically valid to discuss such interference as part of the synchronic rule system of a mother-tongue Hiberno-English speaker. Internal features of English may economically coincide with a possible interpretation of surface structures in Irish -- the possible interpretation of Irish data made by present or historical bilingual speakers may be influenced by the degree of harmony with features in the abstract English system. (2) Rules which are proposed to account for any features of English in Ireland should at least be in broad harmony with a major body of linguistic theory -- Hiberno-English rules may offer refinements or arguments within a theory, but explanations and descriptions should be undertaken with a clearly expressed theoretical basis. (3) The data available for analysing English in Ireland should not be limited to those forms which are felt to be 'peculiar' to Ireland, nor just to forms which are found in Ireland. Restriction of data to Ireland may miss identical or parallel forms and processes occurring in other areas of the world, while concentration on 'characteristic' Hiberno-English forms commits the linguistic fallacy of not placing these forms in the

broader context or continuum in which they inevitably occur.

Finally, I would suggest that a 'global view,' in which attention is paid to all realms of grammar and discourse phenomena; in which linguistic solutions are developed to discuss bilingual relations in the generation of English in Ireland; in which the social and other non-linguistic variables that may have bearing on language are correlated with precisely-defined linguistic variables; in which English in Ireland is seen in context with other varieties of English but not just in contrast with a supposed 'standard' English; and in which processes occurring in Ireland can be compared within an adequate theoretical framework to similar processes occurring in other languages, will greatly facilitate research that will yield both a richer and more realistic understanding of the English language in Ireland, and that will make a significant contribution to an overall theory of universal tendencies in language diffusion and interaction and to a theory of grammar and the language-mind relationship.

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THE ACHIEVEMENT OF AN IRISH POPULATION
ON LANGUAGE TESTS STANDARDIZED IN
BRITAIN AND THE UNITED STATES OF AMERICA

by

MARGARET M. LEAHY

The three tests that are the focus of attention of this study were devised to quantitatively and objectively assess various aspects of children's language ability. They may be described as diagnostic tests because they may be used to help determine pathology. With the advent of more thorough linguistic assessment procedures their use is probably more appropriate for screening assessment, that is, to indicate where further investigation is necessary. The normative data on which the tests are based coupled with their ease of administration render them useful clinical aids for the therapist in early contact with the client referred for assessment.

However, since these procedures were created specifically for, and standardized on, populations in Britain (in the case of two of the tests) and in the U.S.A. (in the case of the third test), the norms they provide may not be valid for assessment of Irish children's linguistic abilities. Nevertheless, they are widely used in this country and because they provide quick measures of the skills that are sampled, and because of their inexpensive availability, it is likely that they will continue to be used. It would, therefore, seem timely to examine their suitability for use with an Irish population.

The tests in question are:

- Test 1: The English Picture Vocabulary Test (Brimer & Dunn, 1973);
- Test 11: The Preschool Language Scale (Zimmerman, Steiner & Evatt, 1969);
- Test 111: The Renfrew Action Picture Test (Renfrew, 1971);
hereafter referred to as the EPVT, the PLS and the RAPT respectively.

A brief description of each test follows.

Test 1: The English Picture Vocabulary Test (EPVT)

The full range version of this test (age range 3;0 - 18;0 years) was used. This most recent (1973) version of the EPVT incorporates the 1962 version of the test which was comprised of a series of four tests of varying age ranges from 3;0 - 18;0 years. The EPVT is based on the American Peabody Picture Vocabulary Test (Dunn, 1959) and it was standardised in Britain in 1962. The manual of the full range version (1973) states that this version was re-standardised by the authors but information relating to this is not yet available.

The test is comprised of a book of plates of line drawings, an administration manual and score recording sheets. There are four pictures on each page of the book. Having explained the procedure to the child, the tester says a word and requires the child to choose the corresponding picture from the four presented. The student's response to each is recorded and the raw score calculated. This is converted to a standard score which is a normalised score with a mean of 100 and standard deviation of 15.

Test II: The Preschool Language Scale

The Preschool Language Scale was devised as a procedure to provide an evaluation of a child's language developmental status in the first seven years of life. The two major dimensions of the scale, Auditory Comprehension and Verbal Ability, are considered to be complementary.

The Auditory Comprehension Scale is designed to assess auditory discriminations and the ability to respond to these. Such aspects of comprehension as grammar, number sense, logical thinking, self-concept, time-space and memory are tapped. Results of the administration of the Auditory Comprehension Scale are expressed as an Auditory Language Age and can be converted to a quotient.

The Verbal Scale is designed to provide a measure of the expressive ability of the child. Among the aspects of expression tapped are grammar, number sense, logical thinking, self-concept, time-space, memory and articulation. The Verbal Ability Age can be converted to a quotient.

Items are arranged according to sequential language progression on the basis of empirical evidence of the average age of attainment by preschool and early primary American children. Normative and standardization data for each item are listed in the manual along with the sources from which these data are drawn. These sources draw on the work of various specialists including that of Gesell, Binet, Piaget, Brown & Terman and Merrill.

Test III: The Renfrew Action Picture Test

The Renfrew Action Picture Test (hereafter RAPT) forms part of the Renfrew Language Attainment Scales, a series of short standardized assessment procedures which also includes an Articulation Attainment Test and a Word-finding Vocabulary Test. The RAPT was developed in recognition of the need for a standardized procedure "to stimulate children to give short samples of spoken language which could then be evaluated in terms of information given and grammatical forms used" (1971 p.2). The test elicits the child's use of words that convey information about "verbal formulation" (nouns, verbs, adverbs) and various morphological rules including verb tenses, nominal pluralization.

The test is comprised of the Action Picture Test manual and a series of nine coloured action pictures. Each child is presented the series of pictures and asked a standard question about each one. Answers are scored in terms of the information given in his response and the grammar used.

The RAPT was standardized on an English population of approximately 500 children between 3;0 and 7;0 years. Nursery schools, more than half of which were in lower working class areas, were used and consequently according to Renfrew (1971, p.21) "the norms for the 3;0 and 4;0 year old children may be a little lower than they might have been had the social classes been proportionately represented".

It should be recalled by the reader that these were first attempts at devising a short useful procedure for use by speech therapists in assessment and would no longer be considered either sufficiently comprehensive or detailed to be used as diagnostic tools. Their main function would be considered by the author to indicate on initial contact with a client whether further language assessment is indicated and, if so, what form it should take.

The population which participated in the research was chosen from three junior classes in six Dublin schools and in one County Monaghan school. All but two of these schools were co-educational to some degree and this allowed matching of male and female subjects. Table 1 (p.3) shows the composition of the research population.

SCHOOL	SEX	N	AGE RANGE IN YEARS ; MONTHS	AREA
1	Boys	18	4;3 to 6;5	North Co Dublin
	Girls	20	4;3 to 5;1	
11	Boys	27	4;0 to 5;1	West Co Dublin
	Girls	19	4;0 to 5;2	
111	Boys	14	4;0 to 5;3	South Co Dublin
IV	Boys	20	5;4 to 7;2	Co Monaghan
	Girls	23	5;2 to 7;4	
V	Boys	44	4;11 to 7;0	South Co Dublin
VI	Boys	30	4;1 to 6;2	South-West Co Dublin
	Girls	33	4;6 to 6;0	
VII	Boys	20	4;1 to 6;1	South Co Dublin
	Girls	12	4;1 to 6;9	

Table 1: Research Population

RESULTS

Statistical tests were carried out to provide:

- (a) a comparison of the Dublin scores with those for the population on whom the tests were standardized;
- (b) an analysis of the effect of socio-economic status on the tests scores;
- (c) an analysis of sex differences in the scores of the population studied.

The test results are given in the following series of tables followed by a brief interpretation of the data.

TEST I: The English Picture Vocabulary Test (EPVT)

AGE RANGE IN YEARS AND MONTHS	DUBLIN POPULATION			ENGLISH POPULATION (STANDARDIZATION SAMPLE)
	N	$\bar{X}$ Raw Scores	S_x	$\bar{X}$ Raw Scores
4;0 - 4;5	51	20.00	8.30	19.88
4;6 - 4;11	76	25.05	9.70	25.00
5;0 - 5;5	56	30.20	10.80	32.00
5;6 - 5;11	40	39.10	9.00	37.83
6;0 - 6;5	13	38.00	11.30	43.00
6;6 - 6;11	8	42.80	12.39	46.50

TABLE II

Mean raw score and standard deviations in 0;6 age groups for Dublin population and equivalent English raw scores.

With one exception, raw scores of the Dublin population increase as age increases. There is a steady increase in the raw scores for the standardization sample. Because the sample size of the two upper age groups (6;0 - 6;5 years and 6;6 - 6;11 years) is considerably smaller than for the other groups, the Dublin scores cannot be considered representative of these age groups in the population studies. However, they indicate a trend in the scoring of these groups. A further breakdown of the age groups was carried out to compare more directly with the scores given in the EPVT manual for the standardization population.

N	$\bar{X}$	SD	AGE	EQUIVALENT	t	SIGNIFICANCE
	RAW SCORES			ENGLISH	VALUE	LEVEL
				SCORES		5%
10	21.00	8.68	4;0 - 4;1	17.7	1.21	NS
13	17.38	7.50	4;2 - 4;3	20.0	2.11	NS
28	20.89	8.60	4;4 - 4;5	22.0	-0.68	NS
19	22.89	8.76	4;6 - 4;7	23.0	-0.05	NS
25	27.84	7.59	4;8 - 4;9	25.0	1.87	NS
32	26.56	11.50	4;10 - 4;11	27.0	-0.22	NS
23	28.00	9.43	5;0 - 5;1	30.0	-1.02	NS
19	29.42	11.31	5;2 - 5;3	32.0	-0.99	NS
14	35.00	11.75	5;4 - 5;5	34.0	0.32	NS
12	39.67	8.96	5;6 - 5;7	36.0	1.42	NS
17	38.70	10.20	5;8 - 5;9	38.0	0.29	NS
11	39.36	8.54	5;10 - 5;11	39.5	-0.05	NS

TABLE 111

Breakdown of raw scores of Dublin population age 4;0 - 6;0 years in 0;2 intervals. The equivalent raw scores and the results of t-testing to compare differences in scores are given on the right of the Table.

Since the sample sizes for each group are considerably smaller for these 0;2 month age groups, these raw scores cannot be considered as reliable as those of the larger sample. When compared with the equivalent English scores by carrying out a t-test there was found to be no significant difference between the two sets of means at the five per cent (5%) level of significance.

SOCIO-ECONOMIC

STATUS CATEGORY

(SES)	N	$\bar{X}$	Sx
1	19	107.11	9.29
2	28	127.71	10.37
3	42	105.92	23.00
4	27	93.07	10.79
5	42	95.07	13.80
6	16	90.37	9.95
7	20	88.10	22.42
unknown	86	96.11	12.92

TABLE IV

Breakdown of scores and standard deviations by socio-economic status was determined by matching parental occupation (where information was available) using the procedure described by Hutchinson (1969) based on the Hall-Jones scale.

There is a large difference between the highest mean scores and the lowest mean scores indicating that the achievement of those from lower socio-economic groups is considerably poorer than for the higher groups. The trend is for mean scores to increase as socio-economic status ascends but there are two exceptions to this (SES 4 and 1).

	N	$\bar{x}$	Sx	STANDARD ERROR	DEGREES OF FREEDOM	t- VALUE	SIGNIFICANCE LEVEL 5%
Males	135	102.59	14.49	1.25	220	2.45	
Females	87	97.56	15.60	1.67			

TABLE V

TEST 1: Breakdown of scores by sex for the urban population of less than 6;0 years (scores given are transformed scores).

A t-test was done to compare the mean scores of these two groups and this showed a significant difference in achievement in favour of males at the significance level of five per cent.

TEST II: The Pre school Language Scale (PLS)

Test IIa Auditory Comprehension Section;
Test IIb Verbal Ability Section.

Table VI shows the mean scores and standard deviations of the entire population studied and also for the Dublin population under 6;0 years which participated in the study.

	N	$\bar{x}$	Sx	STANDARDIZATION N	$\bar{x}$	SAMPLE SD
a) Test 11a	280	116.47	21.06			
11b	280	120.47	23.18			
				52	87.2	17.79
b) Test 11a	222	116.02	17.10		85.4	21.43
Test 11b	222	121.94	18.29			

TABLE VI

TEST 11: Mean scores and standard deviations on:

Test 11a and Test 11b for a) entire research population
and b) Dublin population under 6;0 years.

The average score on this test is 100, therefore, the achievement of the Irish population on this test indicates an above average achievement which is significantly higher than the achievement of the American sample studied.

Table VII shows a breakdown of Test 11 scores by socio-economic status.

SES		TESTS 11a AND 11b			
CATEGORY	N	TEST 11a		TEST 11b	
1	19	118.58	22.57	119.35	32.56
2	28	126.03	15.32	125.53	15.81
3	42	124.09	35.29	126.17	36.89
4	27	118.46	17.67	120.25	17.66
5	42	114.34	12.91	121.50	16.95
6	16	109.13	9.06	111.82	10.05
7	20	104.09	16.68	115.35	16.35
unknown	86	113.04	17.42	118.65	21.05

TABLE VII

Breakdown of scores and standard deviations by socio-economic status (transformed scores given).

For Test 11a, the trend is for mean scores to increase as socio-economic status ascends, with the exception of status group 1. This trend is not repeated however for Test 11b. The highest mean score in Test 11b is achieved by socio-economic group 3 and the lowest by socio-economic group 6 so there seems to be no direct relationship between socio-economic grouping and mean achievement for the verbal ability section of Test 11.

Table VII shows the breakdown of Test 11 scores by sex.

	N	TEST 11a		TEST 11b	
		$\bar{X}$	Sx	$\bar{X}$	Sx
Males	135	118.36	17.15	123.19	19.58
Females	37	112.38	16.47	119.99	16.01
t = 2.59 (not sig. at 5% level)		t = 1.32 (not sig. at 5% level)			

TABLE VII

Breakdown of scores for Dublin population for males and females.

The mean scores for males in both sections of the test is higher than for females. Test 11b (VA) mean scores surpass the 11a (AC) mean scores for both sexes. The difference in mean scores was not significant at the five per cent level.

TEST 111: The Renfrew Action Picture Test (RAPT)

The RAPT is divided into two sections yielding an Information Score and a Grammar Score. These sections are designated as Test 111a and Test 111b respectively in the following tables.

Table IX provides a breakdown of the mean raw scores and standard deviations of the urban population test who were under 6;0 years of age. The equivalent mean scores (test norms) for the English population are given for comparison.

RESEARCH (DUBLIN) POPULATION

ENGLISH POPULATION

AGE	$\bar{X}$ (RAW SCORE)	Sx	N	NORMS FROM TEST	t- value	SIG. LEVEL 5%
4;0 - 4;5	19.94	4.94	50	19	1.35	NS
4;6 - 4;11	21.12	4.60	74	21	0.22	NS
5;0 - 5;5	21.76	4.62	49	23	-1.88	NS
5;6 - 5;11	24.97	3.60	37	24	1.64	NS
6;0 - 6;5	24.34	3.56	13	26	-1.68	NS
6;6 - 6;11	28.00	2.60	8	27	1.09	NS

TEST IIIa

4;0 - 4;5	19.98	6.55	50	22	-2.18	S
4;6 - 4;11	21.32	5.83	74	25	-5.42	S
5;0 - 5;5	22.63	5.45	49	26	-4.30	S
5;6 - 5;11	27.70	6.00	37	28	-0.30	NS
6;0 - 6;5	27.46	7.16	13	29	-0.78	NS
6;6 - 6;11	32.70	5.80	8	31	0.83	NS

TEST IIIb

TABLE IX

Test IIIa and Test IIIb: mean raw scores and standard deviations of the urban population. The equivalent mean scores (norms) for the English population are given.

The mean raw scores for Test IIa and IIb tend to increase gradually with age but there are two exceptions to this trend. These are between the 5;6 years group and 6;6 years group in both sections of the test where the mean score is slightly less for the older age group. The equivalent English mean scores increase by two points for Test IIIa and by one point for Test IIIb. The variation in standard deviations is small for both sections of the test; for Test IIIa, standard deviations range from 2.6 to 4.9 and for Test IIIb the range is from 5.45 to 6.55.

The differences between the Dublin mean scores and the standardization sample mean scores were analysed using a t-test (t-values given to the right of Table X). No significant difference was found between the mean scores for both groups on Test IIIa. For Test IIIb however, a significant difference (at the 5% level of sig.) was found between the means for the age ranges 4;0 - 4;5 years; 4;6 - 4;11 years and 5;0 - 5;5 years. There was no significant difference between the two samples for the remaining three age groups on Test IIIb.

Table X gives the breakdown of scores by socio-economic status for Tests IIIa and IIIb.

SES		TEST IIIa		TEST IIIb	
CATEGORY	N	x	Sx	x	Sx
1	19	62.58	21.61	56.79	21.51
2	28	64.14	21.83	55.25	28.39
3	42	67.11	22.15	60.67	29.99
4	27	66.55	18.19	59.89	22.18
5	42	58.86	18.33	53.72	18.88
6	16	58.50	19.54	49.50	21.30
7	20	66.40	12.22	48.60	12.90
Unknown	86	55.65	22.89	47.81	27.12

TABLE XI

Tests IIIa and IIIb: Breakdown of scores by socio-economic status.

Mean scores for Test IIIa (Information Section) are consistently higher than those for Test IIIb (Grammar Section). Socio-economic status group 3 achieves the highest mean scores for both sections. The lowest mean scores are achieved by status group 7. Mean scores increase with socio-economic status up to group 3 but this pattern is not maintained after that.

Table XII provides a breakdown by sex of the mean scores for Test IIIa and IIIb.

		TEST IIIa		TEST IIIb	
	N	x	Sx	x	Sx
Males	135	59.76	21.54	56.79	19.19
Females	87	52.46	25.19	47.30	24.84

TABLE XII

Test IIIa and Test IIIb: Mean scores (transformed) and standard deviations for males and females.

The mean scores for boys are higher than those for girls on both sections of the test. This difference was not significant at the five per cent level of significance.

The principal objective of this study was to determine whether the norms provided by the three tests used are relevant and meaningful for use with Irish children. As Parastevopoulos and Kirk (1969 p. 50) state "Norms should be devised for every subgroup with which an individual's test scores might reasonably be compared", since the use of irrelevant norms may be misleading. The main reasons to question the relevance of using English or American norms with Irish children are firstly, that the English language as spoken by the Irish is distinctive; and secondly, that Irish children who attend primary schools where they are subject to a bilingual education may be "different" linguistically speaking, to children who are taught exclusively through one language.

The achievement of the Irish population studied showed that there were no significant differences between the Irish mean scores and the English mean scores on both of the English tests, Test I, the English Picture Vocabulary Test and Test III, the Renfrew Action Picture Test, except for the 4;0 - 5;6 years age group on one section of the RAPT (Grammar score). This indicates that these tests in their present state may be used with confidence on Irish Children, but that caution should be exercised when assessing 4;0 - 5;6 year old children with the RAPT.

However, the pattern of achievement of the Irish population on Test II, the Pre school Language Scale, is quite different. The Irish mean scores are much higher than the equivalent American mean scores. The PLS in its present form is therefore unsuitable for Irish children.

These results confirm the findings of previous research done using this test in Ireland (Supple, 1976). Zimmerman (1976) reports however, that the PLS items are probably "too easy" and subsequently (1979) the test has been upgraded.

A number of patterns emerge when the breakdown of the results, according to socio-economic status of the children, is studied. (Tables IV, VII, XI).

For Test I, the EPVT, the tendency is for the mean scores to increase as socio-economic status ascends. The average mean score on the EPVT is 100 with standard deviation of 15, the three higher socio-economic status categories achieved mean scores of over 105 and the four lower categories achievement ranged from a low of 88 to a high of 95.07. This finding for lower status groups to perform poorly on the EPVT is also reflected in studies done by Kelleghan (1974), and Kelleghan & Edwards (1973), and Kelleghan & Greany (1973) in Dublin and also work done in Manchester by Harpin (1973). The EPVT is thought to be an indicator of socio-economic factors in the sense that some children may be familiar with objects illustrated by reason of economic conditions (Schonell & Goodacre, 1975), or that some children may not be familiar with the convention of two-dimensional representation of objects (Yoder, 1974).

In view of the evidence presented above, it seems that the EPVT may indeed be "culturally biased" as Irving (1972) stated in relation to the American version of the test.

The pattern of scoring on Test IIa, the Auditory Comprehension Section of the PLS, is similar to that of the EPVT and this would be expected since both tests measure aspects of language comprehension. But, on the Verbal Ability Section of the test (IIb), there is no consistency in the scoring trend. The lowest mean scores are achieved by the lowest socio-economic groups, but groups four and five show a higher achievement than group one, and group three scores are higher than those for group two. Perhaps the "limited ceiling" (Ward, 1970) for older children is reflected in this trend, since 70% of the population studied were over 5;0 years.

The mean scores for Test IIIa, the Information Section of the Renfrew Action Picture Test, reflect the higher scoring capacity of the top four socio-economic status groups on this test. The achievement of Groups Three and Four is the highest and the achievement of Group Seven is the lowest. Two factors that may have been responsible for this are: a) that the lower socio-economic groups tended to give short, elliptical answers to the questions asked, continuing the pattern of answering with which test begins; and b) that many misinterpreted pictures 5 and 9 and so failed to gain marks for Information.

The Test IIIB results indicate a similar pattern to those of Test IIIa, that the four socio-economic groups achieved higher mean scores than the three lower ones. Group three again has the highest mean score with group seven showing the lowest. The tendency is for the scores to increase with socio-economic status up to group three and they decrease for groups seven and two. The reasons for this decrease in the higher socio-economic status groups is not clear. This section of the test measures Grammatical Ability and it is reasonable to expect differences in the syntactic structures uttered by the different socio-economic groups. Other research measuring the syntactic knowledge of different social classes (Frasure & Entwisle, 1973) and the ability of the lower social class child to produce "correct" grammatical constructions (Bruck & Tucker, 1974) have found similar trends as this.

It is a widely held generalization that females are superior to males in language development. Some studies indicate this female superiority in learning early vocabulary (Nelson, 1973; Clarke-Stewart, 1973) and others strongly suggest that girls progress more rapidly than boys in syntax development (Ramer, 1976; Koenigsnecht & Friedman, 1976). Mc Carthy (1953) found "small but important" differences in favour of girls in general language skills, but in a later study (Mc Carthy & Kirk, 1963) no sex differences were reported except in one area (Auditory Vocal Association subtest of the ITPA) at 5;0 and 6;0 years only. In a review on the literature on sex differences in language functioning, Maccoby & Jacklin (1974) suggested that the advantage of females, if it exists, is small.

Contrary to the evidence in favour of females in language skills, Brimer & Dunn (1962) cite a number of studies where orally administered vocabulary test results show a consistent direction of differences in favour of boys (Templin, 1957; Sampson, 1959; Spearritt, 1962). From their standardization study of the EPVT, they concluded that the EPVT results represent "a characteristic vocabulary difference between the sexes, when this is assessed through oral administration" and that this difference is in favour of boys.

In the present study, only the results of the EPVT indicate a difference in scoring achievement between boys and girls. The difference is in favour of boys and it was found to be significant at the five per cent (5%) level. The results of the other two tests showed no significant differences between sexes in their scoring even though the boys' mean scores are higher than the girls' mean scores.

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REMEDICATION WITHIN THE LANGUAGE ENVIRONMENT

We are all aware that there are many different kinds of English. The Officialese and the Religiousese, to mention just two, and we cope with these with varying measures of success. The child with a speech problem may, however, be in extraordinary difficulty with English, when it is presumed by the adult that he should be coping. The previous speaker has discussed the results of her research into the way in which Irish children cope with the tests of verbal communication which were standardised on non-Irish children. It is now important to decide to what extent cultural and dialectal differences of both patient and therapist affect remediation for those children where a language problem has been identified.

It is an important part of a therapist's evaluation to consider the child's utterance in the context of his environment. Schefflen (1972) states "the ability" to speak is universal, but language is culturally determined". If in this definition, speech is considered as the mechanics of being able to produce sounds, and language as the modification of these sounds into words and sentences, it can be recognised that the way which I, as a Southern English speaker, organise my sounds and structures is different from the way that those of you who are Irish speakers of English organise yours.

Perkins (1977) defines language delay as "the failure to understand or speak the language code of the community at a normal age". Implicit in this is that remediation of language delay requires the therapist to have a working knowledge of what is the norm not only for the child's age but also for the Community in which he is living. What is right in one Community is wrong in another, and thus would require remediation.

A problem frequently encountered is that of confusing normalcy with perfect speech. Perfect speech is possibly an unattainable goal in any speech production, but normalcy is what each one of us here has achieved. For production to be normal, it must conform to certain criteria. It must be intelligible to the listener; it must conform to the vocabulary and syntax of the Community, or culture; and it must employ the prosodic features, i.e., intonation, stress, and pausing patterns of the culture. It must not offend the ear of the native listener?

Quirk (1972), in describing what he calls Standard English, states that it "is that kind of English which draws least attention to itself over the widest area, and through the widest range of usage. As we have seen, this norm is a complex function of vocabulary, grammar and transmission, most clearly established in one of the means of transmission (pronunciation)".

This statement can be interpreted in the terminology of Semantics, Syntax and Phonology when looking at normalcy in Expressive Oral Language.

So called Standard English and Normal Speech and Language are synonymous. The speech therapist is not concerned with arbitrary and imposed standards of correctness, but with normality of production. Who is to adjudge the relative correctness of one utterance against another in a different culture when both convey the same meaning with equal ease for the listener.

The speech therapist aims to assess and remediate where appropriate the speech and language of the patient. These skills would be assessed in the aforementioned areas of Semantics, Syntax and Phonology. The tests used would be standardised on a non-Irish population, as currently there exists no Developmental Language Test designed with Irish children in mind. A commonly used test for Phonology is the Edinburgh Articulation Test, standardised, as the name implies, on children in Edinburgh, and latterly on Nottingham children. When using this test in England, the children automatically achieved a score of at least One (!) because the word

"soldier" is given an Edinburgh Realisation and a final retroflex /r/ is included. The scoring instructions allow for a subjective assessment of the child's environment and states in the discussion dealing with local variants; "These variants are then accepted as Right." This subjective assessment is viable only as long as you know the Variants. It is in this area that the therapist experiences the most difficulty. Some of the variants are very well known, such as the Cockney use of the glottal stop in place of the medial /t/ in such words as Butter, and of course, the dentalisation of /th/ as in English spoken in Ireland. What is more difficult to assess, particularly for a foreigner such as me, are the particular regional differences like the retroflexion of the /s/ as is heard in the West and the commonalisation of the /i/ and /e/ as is heard with some speakers in the area around Cork, where pin means either 'pin' or 'pen'. These, to someone not 'in the know' could constitute a speech defect. A very common occurrence in Upper Middle Class English is the labialising of the /r/ sound. To most people "wabbit" for "rabbit" is definitely wrong, but you only have to listen to some politicians or members of the aristocracy to realise that in certain strata of society, not only does this not constitute a defect, it is a positive social asset!

In Semantics, the vocabulary usage shows differences and individualism. There are words used by all of us, which are peculiar to our Cultures and Environments.

These must be identified and credited when assessing both a child's receptive and expressive vocabulary, and a mistaken diagnosis of poor vocabulary skills be avoided.

An example of this is apparent in the Reynell Developmental Language Scales, a test of both receptive and expressive language, where the child is presented with a sentence:- Bobby pushes baby over, who is naughty? "Naughty" is a common word in England, where the test was standardised, but in Ireland, it is used much less frequently. The likelihood is that a child, particularly one who is having difficulty in language skills, will be unfamiliar with this word, and as contextual clues are minimised in the presentation of this test, is likely to make an error. If however, the phrase:- 'Who is bold ? ' were used, the chances of a correct response are enhanced. It may be argued that in the overall score a difference of only one point in the raw score will make minimal difference, but if this type of cultural error occurs on several occasions, a different interpretation may be the result.

Assessment is an integral part of any remediation programme. Assessment fulfils several functions:-

1. It enables the child's performance to be compared with that of his peers.
2. It enables a child's progress to be charted over a period of time.
3. AND MOST IMPORTANTLY:- It provides a focus for therapy.

It is, however, the interpretation of these results in the light of previously noted knowledge of the norms of the community that allows this final function to be achieved. It is essential that therapy assists the patient towards normalcy, and enables him to be more closely integrated into his language community. Therapy must never alienate the child in his community because of imposed linguistic standards, but approximate his linguistic behaviour to that of the community in which he lives.

So far, the child's performance has been under discussion. It is important to remember that a major factor in remediation is the verbal input by the therapist. As Barnes (1962) states, "The teacher teaches within his frame of reference, the pupils learn in theirs, taking in his words, which 'mean' something different to them, and struggling to incorporate this meaning into their own frame of reference." As therapists we need constantly to remember that, firstly, the children we are involved with have a basic language problem, otherwise we should not be seeing them, and secondly, we may be complicating this problem by the type of utterance we are using. It is necessary for us to employ, syntactically, structures within the child's usage, semantically, words within his knowledge, and phonologically, sounds within his repertoire. It is necessary to have at least a reasonable working knowledge of what is the norm for that region, and to adopt this as the norm for that child. This is an almost impossible task, and you are constantly having to revise your own knowledge in the light of your own experience. As a comparative newcomer to Ireland, this has latterly been my lot! The English as spoken in Ireland has many individual differences compared to the Southern England English to which I am accustomed, in all three linguistic areas previously identified. A few examples I have noticed may highlight this. Firstly, there is the difference in the use of the verbs "bring" and "take". The word "bring" is often used where I would use "take", for example, "Bring your copy home with you." is normal here, whereas I would say "Take your book home with you.". "To make strange" is a structure I have never heard before and have had to have interpreted, and still do not fully realise its meaning. I have noticed, also, a different form of question, and I have not yet determined whether this is a general, or specifically, local usage, (perhaps you could tell me), when a question is posed in the positive, and then immediately negated to form a negative question, such as "You're going out - no?" My form of utterance in this case would be "Aren't you going out?". Crystal (1976) describes in "Development of syntax", the emergence of the double auxiliary (p. 74) and cites the example "He have been crying". He puts this structure into Stage IV and suggests this occurs normally at the age of 2;6 to 3;0. This structure is one not normally used by Irish children, and remediation of this would be superfluous. Another structure not normally used in England is dealing with negation of some verbs. Notable among these are "amn't" and "usen't". Contraction of these verbs tend to be "I'm not" and "I didn't use to" or the full form "I used not to" in Southern English production. It would be easy for an unformed outsider to reject structures not conforming to their ideal, and attempt to impose their syntactical standards on the child. Phonology is the area which people get most concerned about. Children can be corrected for sounds which are:-

- a) developmentally not in the child's repertoire, OR
- b) culturally different in the phonological system.

Undue correction of sounds in either of these categories can produce an unwillingness to communicate, frustration, and can even result in creating problems in speech fluency. I have already mentioned a few examples of these, but others come to mind, such as the different realisation of the /l/ phoneme, the Irish speaker of English using a clear /l/, and the English speaker of received English using a dark /l/. /w/ is seldom aspirated in England, although it is in Scotland and in Ireland, where /hw/ is a common and correct realisation of the initial phoneme in "where" and "when" and other words beginning with "wh". This would be considered rather theatrical and the hallmark of a person who has had speech training lessons in the general English environment. Particular cultural words and expressions do not concern the teacher as much as these differences in phonology, perhaps this is because we as adults are skilled at extrapolating information from all the linguistic cues, and even I understand what is meant by "It was gas", and "we had great crack". It is on the input side that we

must guard against unfamiliar vocabulary, whereas in the child's output of speech we are likely to correct that which offends our ears by what we consider to be its non-conformation to our standards and self - and culturally imposed norms. If I, as an interested adult, am having difficulties in extracting the meaning of some structures, how much more must the child, with an inherent speech and language problem, be in trouble, if unusual utterances are used. Do we, therefore, expect the child to conform to OUR model and reject his attempts when he does not? Are some children given the label speech and/or language handicapped, when they in fact are not, but we are, when it comes to using their language code? Latterly, there has been an increase in the use of formal language programmes. These programmes are available in some instances in commercially published form, and parents may go to any bookshop and purchase them. It becomes increasingly important to remember local variations and to adapt the programme accordingly. There can be a danger that a child, who is having extreme difficulty in acquiring even the language of his community, is expected to understand and use sentence structures and vocabulary which he will never hear used naturally in his environment. A slavish adherence to these programmes can be as damaging as no intervention at all, and each programme should be carefully examined and adapted before it is recommended to a parent.

Berger and Luckman (1966) state that, "Language originates in, and has its primary reference to everyday life". The role of the remedial linguist is to provide the child with a competent linguistic vehicle to cope with the everyday life that he leads.

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SECTION/ROINN 3A

The acquisition and usage of interrogative and negative forms by Irish schoolchildren learning French.⁴⁵

By Roger Bennett Trinity College, Dublin

Some differences between learning a language in a "natural" and a "non-natural" environment are highlighted by the acquisition of interrogative forms. In a natural environment, where the target language is being used for normal communicative purposes, the learner is accustomed to asking questions; in a non-natural environment - the classroom - the learner spends more time answering questions than asking them, and may therefore have a much better passive than active knowledge of such forms.

As for negative forms, many learners have difficulty in learning constructions involving "ne...pas", especially in word-clusters where the two negative markers are widely separated. In a non-natural environment, this difficulty may be compounded by curricula in which items for learning are sequenced according to supposed order of complexity, so that a learner does not encounter such word-clusters until at an advanced stage of the course.

What type of survey to use? A longitudinal survey, often used in research into first language acquisition and second language acquisition in a natural environment, would be unsuitable because of the relatively slow rate of acquisition in a non-natural environment. But I intend to monitor the progress of a limited number of beginner-learners longitudinally.

The principal source of data will be a cross-sectional survey. I will make

two comparisons: 1. between the performances of students with a largely oral-aural learning background, and of students who have followed a more "traditional" syllabus; 2. between the oral and written performances of these groups.

Performance will be correlated with socio-economic background. The survey will be administered to students in the pre-Leaving Cert. year.

Elicitation procedures:

Both oral and written tests will be used.

A. Oral test for negatives:

- i an imitation exercise
- ii a picture test

B. Oral test for interrogatives;

- i an imitation exercise
- ii an exercise in which the student performs communicative tasks involving the use of questions.

C. A representative sample of students will be recorded in conversation with a native French speaker.

D. Written test for negatives;

- i a translation exercise
- ii the transformation of model sentences from the affirmative to the negative.

E. Written test for interrogatives:

- i a translation exercise
- ii the student is given a series of answers for which s/he must suggest questions
- iii see Bii above.

F. Free composition:

To reduce artificiality, the test items are related closely to normal communicative needs. Questions and sentences to elicit specific structures are randomly interspersed amongst others which do not have this aim. Lexical and semantic content is kept simple.

* Summary of a paper read at the Irish Association for Applied Linguistics at Carysfort College on 7 March 1981.

THE DEVELOPMENT OF A PHONETICS LABORATORY
FOR USE IN LINGUISTIC RESEARCH *

Ailbhe Ní Chasaide.

Centre for Language and Communication Studies, Dublin University

"The rain in Spain
falls mainly on the plain."

The perception of phoneticians and their work by the general public rarely extends beyond the eccentric antics of Professor Higgins, the famous G.B.Shaw character, and his attempts to correct a flower girl's pronunciation of the immortal lines above. Indeed, Professor Higgins has done much to foster the myth that phonetics is limited to establishing norms of pronunciation.

The study of phonetics, which has been traditionally concerned with the description and classification of speech sounds in terms of their articulation, has been revolutionised by the technological advances of this century. The scope of the study can be outlined with reference to fig. 1, and divided into three main areas.

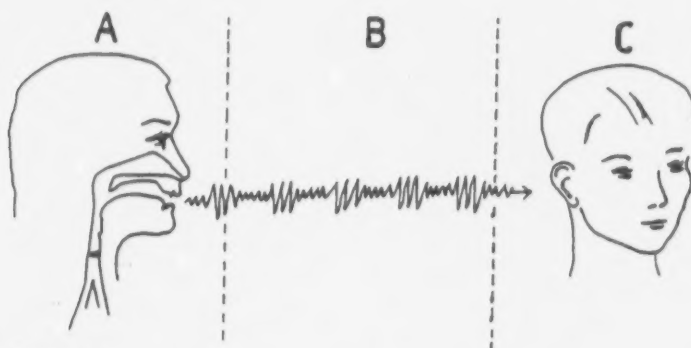


Figure 1

- A. Production. Speech is the result of an airstream, usually set in motion by the lungs, which is interfered with to produce sounds as it travels through the vocal tract, e.g. at the vocal folds, tongue, lips etc.
- B. Acoustics. The speech waveform as it travels from speaker to listener can be recorded and analysed into its component frequencies. Traditionally, the device used to do this was the sound

* This article describes the phonetics laboratory which is currently being developed in the Centre for Language and Communication Studies, Trinity College, Dublin University.

spectrograph. Nowadays, most acoustic analysis of speech for research purposes is carried out by computer. Fig. 2 shows a spectrogram of the phrase 'cois na leapa.'

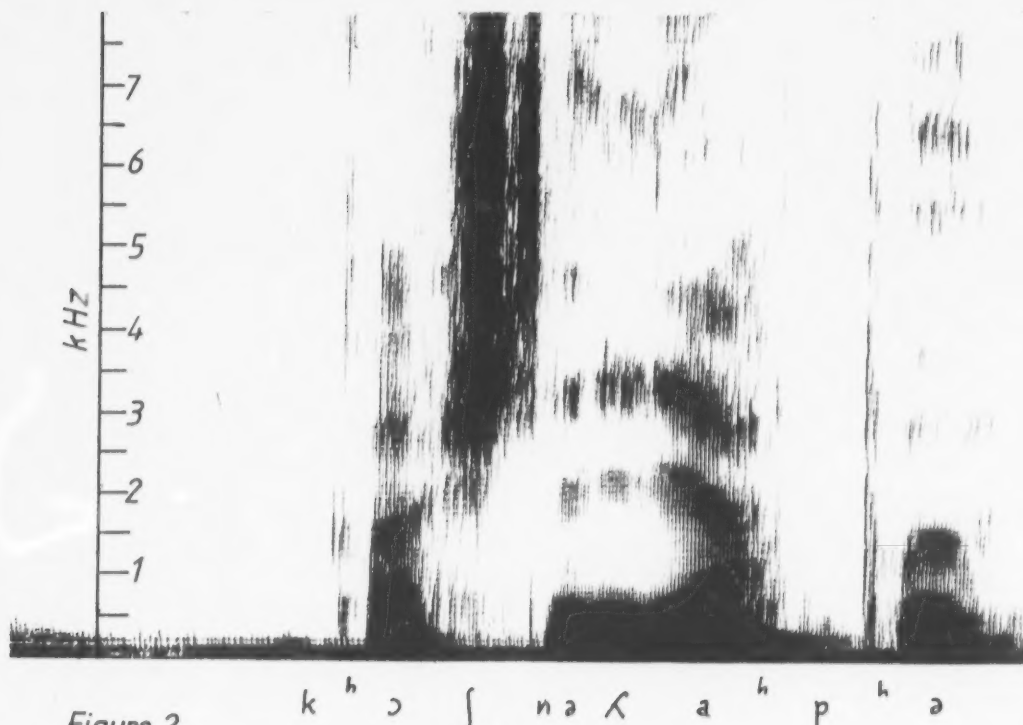


Figure 2

The more popular term 'voiceprint' may be familiar to some, since there has been considerable controversy surrounding their use in criminal investigation. The acoustic description of speech sounds is linguistically interesting insofar as it can be related to the production of speech and its perception. Indeed, acoustic description is a prerequisite for most work on speech perception.

- C. Perception. The question inevitably arises as to which features of the speech waveform are extracted by the listener to reconstruct the message. The main technique used here is speech synthesis, whereby the most important parameters of the acoustic signal to our perception are artificially synthesised. These parameters can be manipulated (removed, added to, changed) in various ways to test their relevance to our perception.

As the first stage in the development of the phonetics laboratory, we are concentrating in particular on the area of speech production. The configuration of the system which is currently being set up is illustrated in fig. 3.

The aerodynamic unit (1) registers information concerning air-flow rates and pressures during speech. To obtain air-flow rates, the informant speaks into a mask, (2), with two compartments to measure flow from nose and mouth separately. By inserting a catheter containing a pressure transducer, (3), through the nose we can obtain oral pressure (if the transducer lies in the pharynx), or the equivalent of subglottal pressure (if the transducer is swallowed into the oesophagus just below

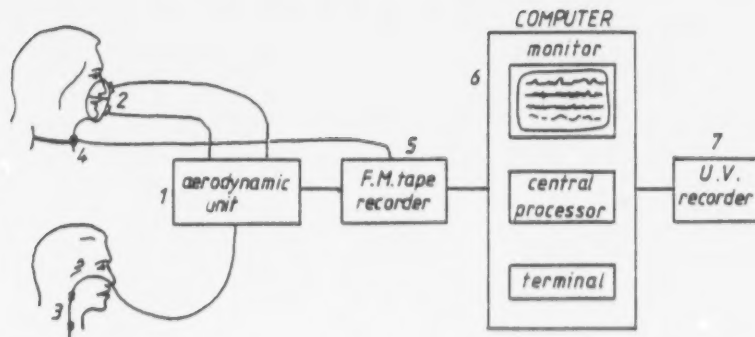


Figure 3

the glottis). These, along with a larynx microphone signal, (4), are recorded on a multichannel F.M. tape recorder, (5). The signals are digitised, stored in the computer, (6), and displayed on a monitor.¹ Using cursors, various measurements and calculations are made from the displayed traces, and the results are processed by the computer. The ultra-violet recorder, (7), gives a permanent hard copy of the signals.

Fig. 4 shows a number of possible traces that might appear on the monitor. With the exception of the nasal air-flow trace (for which I have added freehand to the original record a typical sample for the purpose of the illustration below) they have been obtained from a mingograph printout for the phrase; 'Dúirt sé "leapa" liom'. The traces show, from the top: Audio waveform, taken from a larynx microphone signal, Oral egressive Air Flow, Nasal Egressive Air Flow, Intensity, Laryngograph, and Fundamental Frequency, or pitch. (The last three of these have not yet been incorporated in our system).

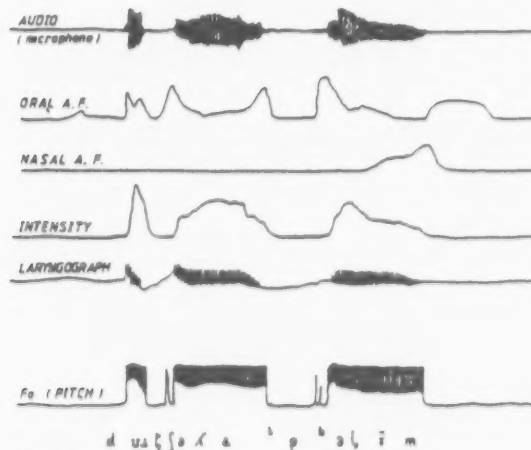


Figure 4

1. The interfacing of external equipment with the computer and the software development involved, are being carried out by Mr. Eugene Davis of the Centre for Language and Communication Studies.

These traces yield a wealth of information, not only on the aerodynamics of speech, but also on its articulatory and temporal organisation. A few examples may help to illustrate their use. Looking at the Oral Air Flow trace one can tell there is complete oral occlusion when the trace reaches zero, and also the duration of such occlusion, e.g. for [p] in *leapa* and [m] in *liom*. If we relate Oral to Nasal Air Flow we will see that the important distinction between the two segments mentioned is the presence of nasal air flow for [m]. From these traces, it is possible to see and make quantitative measurements of nasal coarticulation with the preceding vowel (anticipatory velic opening). The degree and duration of coarticulation could be expected to vary somewhat between languages, and even between dialects of the same language. Coarticulatory evidence in general has served as the starting point for some important theories on the neural control of speech production.

In a clinical application, nasal leakage, characteristic of the cleft palate condition, would be visible during speech and, particularly, during the oral closure for [p]. A quantitative assessment of cleft palate damage and of improvement subsequent to speech therapy, or surgical intervention, can thus be aided by this type of instrumentation.

By relating more traces to the two already mentioned, one can add further dimensions to the picture one is building up of a particular aspect of language structure. An inspection of the audio waveform, from which voicing and aspiration can be deduced (top trace), shows voicing to be another distinguishing feature of the two segments [p] and [m]. At a more detailed level, one can investigate the temporal relationships between laryngeal and supralaryngeal activity in voicing contrasts. These traces, along with further dimensions, are central to my current research - an investigation of the phonetic realisations of phonological voicing oppositions in a number of languages including Irish, Icelandic and Scottish Gaelic.

The laboratory has been designed in a modular fashion. Further development is envisaged in two stages. In the immediate future, it is planned to expand the present system by adding the means to analyse further types of information, e.g. the laryngograph, glottograph, pitch and intensity extractors. One important addition will be electropalatography on which work has already begun². This technique yields precise articulatory information, which is obtained by wearing an artificial palate (similar to a dentist's plate) into which electrodes have been inserted. A picture of the roof of the mouth showing the areas of tongue contact can thus be obtained. This we hope to be able to display simultaneously with the range of information already discussed. The picture will be dynamic, changing as a cursor is moved from left to right on the monitor screen.

Longer-term development will be aimed at the investigation of the acoustics and perception of speech. This will require in the first instance an expansion of computer storage and memory facilities. In the development of acoustics (and synthesis), we hope to work in close contact with the Department of Electrical and Electronic Engineering, where development

² This project is in collaboration with Frank Heuston of the Dental School, Dublin University.

work in the area of speech recognition is in progress.

As the first of its kind in the Republic, the phonetics laboratory should greatly extend the potential range of linguistic research here. The Irish language has an unusual sound system which presents the phonetician with a number of interesting problems, and it is expected that the laboratory will be used by American and European, as well as by Irish scholars.

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ERROR ANALYSIS OF IRISH STUDENTS LEARNING
FRENCH

METHODOLOGY

1. RECORDING

Material

At the outset, the research was intended to include study of certain morphological and syntactical phenomena as well as the phonetic and phonological. However, it was soon restricted to pronunciation because of the extent of the material to be treated under that heading. The corpus consists of material recorded, using the C.G.M.62 test, devised by C.R.E.D.I.F.; this test provides a series of pictures, depicting everyday family life, which the subjects then describe in their own words. An obvious advantage of this type of test, is that one does not have the problem of mispronunciation due to a lack in reading skills.

Subjects

The subjects chosen for the test are girls preparing for the Leaving Certificate Examination. It was felt that by choosing students at this level, (i.e. end of Secondary School, beginning of Third Level), the analysis could be useful to both Second and Third Level teachers of French pronunciation. It is, at the moment, regional in its scope, since the students involved are all natives of Cork. This is largely for the purpose of having a reasonably homogeneous group, from the point of view of linguistic background.

2. PRELIMINARY CONTRASTIVE ANALYSIS

I have also undertaken some research on contrastive analysis of French and Hiberno-English, (the first language of the students recorded). There is quite an amount of work available on French - notably that of Pierre Delattre. His comparative work, however, refers more specifically to American English. Other useful work has been published by Pierre and Monique Léon and by researchers in the Institut Phonétique d'Aix en Provence, for example, Georges Faure and Albert Di Cristo.

Unfortunately, many researchers in the field of pure phonetic description of varieties of English, give too limited descriptions, confining themselves to comments on the /l/, the post-vocalic /r/ and the "schwa" /t/. It is surprising, for instance, that J. D. O'Connor in his Phonetics, published by Penguin in 1973 (4th edition 1977), should ignore the reduction of some R.P. vowels to pure vowels in Hiberno-English. The problem is greater in the field of Applied Phonetics, since very little work has been done in the specific field of Irish students learning French.

3. TRANSCRIPTION

Symbols and Abbreviations

The average number of phonemes per student is about six hundred. Their transcription is based on the International Phonetic Alphabet, with some deviation in the use of diacritic signs. Each segment, (rhythmic group), is first transcribed graphically, disregarding morphological and syntactical errors, then a normative transcription is given, followed by the actual phonetic transcription as recorded on the tape. The final step, at this stage, is to give the "Ecart", i.e., the distance which separates the pronunciation from the norm.

Examples:

T.N. [sœ b] [t̃]

T.P. [s̃ œ b] [t - ã]

"Ecart" œ / α t̃ / t

Norm

To establish this norm, I have used Pierre Léon's book entitled Prononciation du Français Standard, published in Paris by Didier, in 1966. I also decided to use the maximum phonological system of thirty-six phonemes, in order to give as detailed a description as possible.

Description of Error

Finally, a commentary is given on each phoneme, describing

- the phonetic nature of the error
- its context
- its frequency in relation to the total number of realisations of the phoneme
- possible reasons for the appearance of the error.

The overall results of the research will then be based on the accumulation of information obtained from each individual recording.

Classification

At this stage, also, errors will be classified according to their gravity from the point of view of the function of communication. In this light, the most serious errors are the phonological, which can lead to misinterpretation of the message. Phonetic errors are less important in that they are unlikely to lead to misinterpretation, but would probably reveal a "foreign accent". Finally, the least serious would be the use of regional or stylistic variants (provided they are used consistently).

4. CORRECTIVE EXERCISES

This classification will indicate where the need for corrective exercises is greatest and these will be devised accordingly. It will also permit an appreciation of the adequacy or otherwise, in an Irish context, of exercises devised by, for example, Pierre and Monique Léon, Georges Faure and Albert di Cristo.

PRELIMINARY FINDINGS

From the transcription so far, it seems that premises based on preliminary contrastive analysis are justified.

1. POSITIVE TRANSFER

Generally, Hiberno-English speakers, have some advantages over their RP counterparts in learning French. These are, notably

- the smaller number of diphthongs,
(/aɪ/, /aʊ/, /ɔɪ/)
- the pronunciation of a "clear" /l/ in all contexts,
- the pronunciation of the RP /θ/ and /ð/ as dental stops
(opposed to /t/ and /d/ alveolar stops).

This favours positive transfer to French, which has no diphthongs, clear /l/ in all positions and dental /t/ and /d/.

2. NEGATIVE TRANSFER

Nevertheless, one must conclude that the possibilities for negative transfer are greater, given that the phonetic bases of French and Hiberno-English are diametrically opposed. This can be seen at all levels, in the phonemes themselves and in prosodic features.

<u>H.E.</u>	<u>French</u>
1. diphthongs	1. no diphthongs
2. lax vowels	2. tense vowels
3. neutralisation of vowels in unstressed syllables	3. -
4. nasalised vowels	4. nasal vowels
5. no front rounded vowels	5. a series of front rounded vowels

- | | |
|--|--------------------------------|
| 6. aspiration of consonants | 6. no aspiration |
| 7. alveolar /r / | 7. uvular /r / |
| 8. /j/ not appearing in final position | 8. /j/ in all positions |
| 9. /t/ sometimes pronounced as [ʔ] | 9. - |
| 10. free stress | 10. fixed stress |
| 11. tendency to closed syllables | 11. tendency to open syllables |

All of these differences have led to errors of varying gravity.

Vowels

A large number of errors are related to stress and rhythm, in particular, the neutralisation of unstressed vowels. A striking example is the sound /ə/ which would not appear to present any great difficulty to the H.E. or indeed English speaker. However in a sequence such as,

"Il est à table"

[il(ə)stabl]

the second [ə] is frequently found to be correctly pronounced (at most, it would have slightly closer quality than in Standard French), whereas the first [ə] is almost inevitably pronounced as the neutral vowel [ə̃]. One must therefore ensure that the learner is able to pronounce the phoneme in all contexts, (including stressed/unstressed), whether he already possesses the phoneme in his native system or not. The importance of context is also seen in the fact that /j/ in final position will tend to be pronounced as [ɥ] or [i] because /j/ doesn't appear in this context in English.

Linguistic distance has also to be considered in that phonemes which exist only in the target language have caused difficulties - in particular the series of front rounded vowels, /y/, /ø/, /œ/ and also the nasal vowels /ɥ/, /ø̃/, /œ̃/ and /ɛ̃/. In the case of /y/, for instance, the most frequent mistake is to confuse it with the back rounded vowel /u/. With regard to nasal vowels, there is usually the addition of a consonantal appendix, usually /ŋ/. Example [mɑ̃mɛ̃ʔ]. Another big problem is the lack of tension in vowels - this leads to diphthongisation which is particularly noticeable if vowels are lengthened by stress, or where there is hesitation. For example, in the sequence, [lədɛʒwɛ̃], if [dɛ] is stressed, it is likely to become [dɛʔ].

Consonants

The phoneme /r/ seems to present most difficulty: it is most frequently pronounced as the alveolar English /r/.

Aspiration is also noticeable, as can be expected, in the voiceless stop consonants. / t / and / d / are sometimes pronounced with an alveolar articulation.

There are also some isolated mistakes of devoicing consonants:

"maison"

This would seem to be by association with the spelling.

Conclusion

Errors recorded so far would seem therefore to confirm initial expectations except with regard to one phenomenon - the "soft" / t / - contrary to what was expected, it is not a frequent mistake; in fact only 2.5% of / t /'s transcribed are pronounced in this way.

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SIMPLIFICATION PROCEDURES IN THE INPUT AND OUTPUT OF 2nd LANGUAGE LEARNERS.

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In my research I set out to attempt to establish a developmental sequence for the acquisition of French in the area of verb morphology and personal pronouns. Initially I was inspired by the research of Heidi Dulay and Marina Burt who showed that immigrant children from very different language backgrounds (Spanish and Chinese) learning English in a natural environment in the US acquired a certain set of grammatical items in a fixed order. (cf. Dulay and Burt 1973, 1974a 1974b) They argued from this that the children were showing evidence of a creative construction mechanism, that their learning was largely independent of input and that there was a natural order for the acquisition of at least some parts of syntax in English. My question was: Could this be true of French? Is there a natural order for the acquisition of certain items of French syntax?

It has also been suggested by Corder (1979) and others (cf. for example Schatz and Gelman 1977, Newport, Gleitman and Gleitman 1977) that native speakers of a language regress to an earlier stage of their own development when they are interacting with novices in the language, that they simplify their language to a stage which they themselves passed through as children. But there is some dispute about just how far native speakers will simplify. It struck me that by examining also the speech of French people to foreigners I might be able to establish a simplification sequence, or a series of stages in the simplification process, which could have points of correspondance (but in reverse) with the developmental sequence of learners.

With this dual purpose in mind I began data gathering in summer of 1980 in France. In order to test just how far French people would go in their simplifying processes I gathered data from a wide range of people of different social backgrounds and in different situations, pretending to have very little knowledge of the French language, and speaking to people in shops, on the street, at the dentist's, in social gatherings, etc. There were many of the features listed in the literature for Foreigner Talk, - slower rate, higher pitch, overall simplification, etc. However in the area of morphology or syntax, there were only two cases where one could say the level of broken French or ungrammaticalness may have been reached. One was in the course of an explanation by a Metro information officer on how to use the Metro:

- *Alors, un ticket. In ticket vous. In ticket Madame. (pour omitted)*

The second was an assistant in the *Galeries Lafayette* speaking about reductions on articles being exported.

- *Et cadeau....femme? Assistant: Oui, cadeau femme pareil, 13%.*

The second case may be an instance of the native speaker being influenced by the "input" from the foreigner. It would seem from this data (which is still in the process of being analysed) that in these cases at least French people were not prepared to descend to the level of pidgin or broken French.

The other side of the research was in the language of learners of French. For this purpose I interviewed some 15 students of different nationalities at the Alliance Francaise in Paris, but the principal data gathering was from three Irish children aged 6,9 and 12. They had never learned French in a formal way, and in the summer of 1980 they spent five weeks in France; three of these weeks were spent largely in a type of holiday camp - *Centre Aere* - by the kind permission of the Parisian municipal authorities. All the other children in the camp were French. The three Irish children were recorded three to four times each during and immediately after this period. Seamus, the eldest, gave evidence of the following transitional grammar:

Verb Morphology: a reduced but well-defined system. He had readily distinguishable forms for the following tenses, and the correct functional distinction in the use of each, but usually had one form throughout for all persons and numbers.

Thus: Present: a short form, usually corresponding to that used for singular.

Passé Composé: a + a form of the verb (frequently the correct past participle)

Imparfait: the ending [-e] throughout.

Futur: va + infinitive.

There were also scattered examples of Conditionals and past conditionals.

Personal Pronouns:

Subject: correct choice for person, number and gender.
Indirect Object: Correct use in a communicative context of all except 3rd person plural. Uncertainty appeared when his attention was drawn to form.
Disjunctives: Correct usage for all except 3rd person plural.
Direct Object: Total ABSENCE for 3rd person. This was not an avoidance strategy, since the context frequently demanded a pronoun. For example:

- *Il va utiliser comme des chaises.* (les omitted; standing for les bancs)

Syntax: Totally correct use of the simple negative *ne ... pas*, but no use of *ne ... rien*, *ne ... personne*.

Complementizing: Where there was a question of deciding between an infinitive or a sentential complement, he made the correct choice 99% of the time, though frequently there were errors within the sentential complements.

e.g. In answer to the question: *Qu'est-ce qu'il leur demande de faire?* - *Il demande qu'ils vont... ils jouent.*

This data provides evidence that Seamus was coming to grips with the French language at several different levels at once. In the area of verb morphology he seems to be acquiring the verbal system in the following order: Tense and aspect markers first; Person and number markers later. (The first person plural ending was beginning to appear in later recordings. As for the pronominal system the total absence of the direct object pronouns was surprising.

When analysing the data the question kept cropping up of WHY this was so. Also it was apparent that the data was very restricted, having been collected in artificial and limited contexts - in conversation with the researcher, using the Bilingual Syntax Measure II of Burt, Dulay and Hernandez-Chavez 1977, or talking about his holiday in France or the journey. There is no data on the input of the French children in the holiday camp, or of adults around him. This would be essential for a full and proper interpretation of his output.

Many researchers have stressed the importance of considering input data in any analysis of language acquisition. (cf. for example: Snow and Ferguson, 1977, Hatch, 1974 and 1979, Wagner-Gough and Hatch 1975). We have already looked at features of the language of native speakers interacting with novices in the language. The question must now be asked: To what extent (if any) does the modified input (in which the native speaker simplifies the language and clarifies the message) make the target language easier for the novice to LEARN? I intend to continue collecting data, but now, rather than separate the two areas, to draw them together and record both output and input data for the same learners in different situations. The objective is to see if it can be established that any features in the input may have a facilitating effect on the learning process. There are many possible such features: frequency of occurrence of a particular form; its phonetic simplicity, or regularity; its grammatical or semantic simplicity; its value in communication, etc. etc. There are obviously many difficulties in such an attempt. For example it has been pointed out that the fact that a feature or a set of features exists in the input does not necessarily mean that it influences learning. It might just as easily be the case that it is the linguistic level of the learner that causes certain features to occur in the speech of someone addressing him or her. Dulay and Burt (1977) themselves recognize the need for this type of research and analysis and suggest that

"the formulation of accurate and predictive principles concerning the effects of input factors on progress in acquisition might best be accomplished by SPECIFYING CONDITIONS UNDER WHICH EXTERNAL FACTORS WILL HAVE AN EFFECT. Such conditions may have to do with relationships among several factors operating at the same time and between input variables and internal processing factors." (p. 109)

While this appears a daunting task, the techniques for carrying it out would seem to be available now in the form of implicational scaling analysis which is used in the analysis of variation in language in sociolinguistics and in Pidgin and Creole

linguistics. Use has been made of this method of analysis in second language acquisition research by Roger Andersen (1977 and 1978). It would be beyond the scope of this short paper to go into this in detail. But it would appear that it should now be possible to move closer to isolating in input what are the facilitating factors for learning and their relative weighting.

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Comhshamhlú Tadhallach

Cáit Ní Dhomhnaill, MA., PhD., Coláiste na hOllscoile, Gaillimh

Le haghaidh chomhshamhlú na Gaeilge, bailítear consain ina dtrí aicme:

- (i) déadaigh, ailbheolaigh, stuaigh, taobhaigh, creathaigh;
- (ii) frithchuimiltigh, liopaigh;
- (iii) frithchuimiltigh, taobhaigh, creathaigh

Ní deacair an tsiollaireacht riachtanach chomhbhallach a chur ar chaidíní na haonaicme. In mo chanúint féin (An Cheathrú Rua), tá coibhneas 25::5 idir comhshamhlú siar (regressive) and comhshamhlú ar aghaidh (progressive). Is iondúil dhá athrú nó a trí i gcomhshamhlú, mar téann sé i gcion orthu seo: glotas, siollaireacht, caoile is leithead.

Tugtar thíos dhá eiseamláir shuntasacha as a raibh uilig san alt iomlán. Freagraíonn an péire don fhoirmle ghinearálta, $-D \overleftarrow{T} \rightarrow DC$, áit a dtuigtear $D =$ déannach focail, $T =$ túschonsan focail, $C =$ comhshamhlú (ar D nó T).

1. Tá an comhshamhlú seo i gcló:

$$\begin{matrix} -t' \\ -t \end{matrix} | s' \rightarrow ts'.$$

Tá súil agam lena chruthú ar ball nach stuach mír theanga, $[t]$, ach stuach lainne, $[t']$, atá páirteach i dtoradh an chomhshamhlaithe sin.

2. Tá an darna heiseamláir ina comhshamhlú stairiúil sna cairn, $[rs, rs']$, agus gheibhtear i suíomh sandhi freisin iad (chuir sé, d'fhógair sí, etc.) Siollaireacht ar leith, $[s', s]$ alafóin, atá ar a samhail i nGaeilge Leath Chuinn, agus í suntasach i mBéarla an limistéir chéanna, ina cheann sin. Ní heol dom in urlabhra Leath Mhogha í.

Ní haonfhocal do na scoláirí a d'fhoilsigh comharthaíocht shiollaireacht na heiseamlára (Gaeilge is Béarla). Luaigh cuid acu athchasadh teanga léi, ach ní léir dhom aon athchasadh uirthi, agus tá na foghair in mo chuid Gaeilge féin. Gnáth-chreathach stuach atá san /r/. Frithchuimiltigh stuacha iad /s', s/, le mír na teanga crochta, in ionad a bheith íseal ar chúl an draid íochtair, mar atá le siollaireacht normúil an dá s-fhóinéim; is inspéise suíomh ard nó suíomh íseal mhír na teanga in /s', s/ Bhéarla Shasana freisin.

ABSTRACT

Research in Progress:

Marie de Montfort Supple

The effect of auditory perceptual functioning on acquisition of phonology:

A large proportion of the speech therapist's time is spent treating delayed and disordered phonology. Van Riper (1978) estimates that 80% of therapy in School age population is of this nature. Therapy for these children often takes the form of auditory discrimination drill, sometimes between target and substituted sound but more often it takes the form of a general nature. It was decided to carry out a study on Dublin School children to determine the part played by auditory processing in the development of phonology and thus, its relevance to therapy.

Method:

Sixty subjects; twenty-six male and thirty-four female were assessed in their first term in primary school to establish:

- | | |
|----------------------------------|--|
| 1) Phonological development | - using Edinburgh Articulation Test. |
| 2) Auditory discrimination | - using (i) Picture Sub Test of Stycar Test.
(ii) Picture of Minimal Pairs. |
| 3) Auditory memory for digits | - using Aston Index Sub Test. |
| 4) Auditory memory for phonemes | - using Test designed for project. |
| 5) Auditory memory for sentences | - using WPPSI Sub Test. |

Results:

Significant but low rank order correlations were found between phonological development and 2, 3, 4 and 5 above.

Subjects were also grouped according to the number of errors on the Edinburgh Articulation test as follows:

- Group (1) 0 - 3 errors.
Group (2) 4 - 10 errors.
Group (3) 11+ errors.

The scores for each group on the auditory processing tests were plotted:

It was found that the highest scores on tests 2 - 5 were achieved by subjects in group (1), and the lowest scores by those in group (3). However, some subjects in group (1) received low scores on these assessments but none of the low scorers on the Edinburgh Articulation Test received higher scores on these tests.

Discussion:

No very definite conclusions can be drawn from the results to date. The lack of sensitivity of the test of auditory discrimination used is considered to be a factor in that area. Unfortunately none of the current commercially available tests satisfy requirements in that they do not use relevant contrast, the reason for this being that these contrasts cannot easily be represented with pictures, (Locke (1980)).

Future Work:

A more sensitive test of auditory discrimination is being designed and in April 1981 will be administered to the subjects in the original sample as will the Edinburgh Articulation Test and tests of memory. Results will be analysed to discover if the results of this phonological assessment relate to:

(a) the initial assessment of auditory memory and discrimination

and

(b) to present assessment of auditory memory and discrimination.

A group of children with phonological disorders will be assessed on tests of memory and discrimination to establish if a greater correlation exists between the variables than was found in the normal school population.

In the event of the newly designed test of discrimination proving more sensitive than the test previously administered, an attempt will be made to standardize this test.

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THE TRINITY COLLEGE RESEARCH PROJECT ON INDEPENDENT
LANGUAGE LEARNING

D.G.Little and D.M.Singleton

The Centre for Language and Communication Studies was established in 1978 as a special development project of the Higher Education Authority. Besides offering a range of audio-visual facilities and services, contributing to a variety of undergraduate courses, and providing supervision for postgraduate students, the Centre exists to conduct research across the spectrum of language and communication studies. To date research has been established in applied linguistics and phonetics. This report is concerned with developments in the former area.

Our research project on independent language learning inaugurates a new approach to the service teaching of second languages in Irish universities. Irish university education rarely has a second language component in subject-areas other than Classics and Modern Languages. The desirability of such a component, either to broaden the base of study or as an element in vocational training, is obvious in view of Ireland's membership of the EEC and her involvement in international affairs. Many university courses demand that entrants should already have a modern European language; but the level achieved by Irish school-leavers in European languages is (quite properly) rarely sufficient for the specialized applications that might be required at university (e.g. the ability to read historical documents in French or scientific papers in German). Furthermore the university curriculum may develop a need for languages that are not taught at second level.

Now, the hard reality is that the resources are not available for the recruitment of additional staff to provide instruction in languages so required by students. In any case, it would not always be easy to find teachers qualified to mount appropriate programmes (e.g. in non-European languages). Accordingly, any attempt to increase students' language learning opportunities will have to rely heavily on materials designed for "independent" or self-instructional use. Moreover, in order that such materials should be relevant to students' needs and optimally suited to self-instructional purposes, it has first to be established what students' language needs actually are, and what kinds of attitudes and experience they bring to the learning task.

Our project, which was launched in January 1980 and is scheduled to last for five years, is designed to meet these points. Early in 1980, with the help of our sociologist research assistant, we devised a questionnaire that would enable us to gather information about students' second language needs, their previous experience of language learning, the methods and materials they had been exposed to, and their reaction to the learning task. The questionnaire has been administered to random samples of the graduate and undergraduate student population of Trinity College. In order to gain a sense of the extent to which the data thus collected are typical of Irish third-level institutions generally, much smaller samples of the student population in other institutions are at present being surveyed. The final report on this stage of the project should be ready by the end of 1981. In it we hope to present not only a clear view of second language needs at third level but also a series of well developed learner profiles.

In November 1980 we increased our research team by two assistants and began work in the area of language learning materials. The data produced by the survey of the student population of Trinity College made it possible to begin to identify needs in relation to western European languages, including Irish. Accordingly our two new assistants have begun to analyse existing self-instructional materials with a view to identifying methodological problems and drawing up criteria by which these materials could be supplemented to meet specific learner needs. These analyses will be published in due course. At a later stage in the project we expect to produce our own learning materials.

We are not yet far enough advanced in the project to have begun to involve ourselves in the organizational problems attaching to self-instructional language courses. We expect that two areas in particular will require close attention: motivation and feed-back. How is a student who is teaching himself French to maintain his interest at a level that will make his learning effective? And how is the same student to measure his progress? Various commonsense solutions suggest themselves to these problems. At this stage it is enough to report that we are investigating the feasibility of using microprocessor technology to develop a means of self-assessment. If our work in this area is successful it will have implications for developments in the area of programmed language learning.

The ultimate result of the project will, we hope, be a significant improvement in the range, relevance and efficiency of the self-instructional language learning facilities in Trinity College. In addition, we expect eventually to be in a position to offer new insights, materials and technology which will be more generally applicable.

SECTION/ROINN 3B

Linguistics - How are you!

Dónall P. Ó Baoill

Institiúid Teangeolaíochta Éireann

My purpose in this paper are twofold:

- (a) to outline the strengths and failures of present linguistic programmes at third level, and
- (b) to make recommendations on how best to cater for the needs of those pursuing the study of linguistics in our Colleges and Universities.

Linguistics as Theory Building:

It is quite clear from a short perusal of current literature in phonological, syntactic and semantic works that linguistics is principally concerned with theory building. The questions being asked are of a very general nature and are quite basic in their content, such as the nature and legitimacy of evidence etc. Since current linguistics is preoccupied with theory building, the concepts being elaborated are not likely to be of any immediate relevance to language teaching or other practical concerns.

There is also no doubt in my mind that linguistics has been oversold in recent years. This overselling was the result of the Linguistics boom of the late sixties and early seventies, when the subject was introduced into Universities and Teaching Colleges by lecturers whose enthusiasm was for linguistics rather than for teacher training or for application in classroom teaching. Many of the things taught in such linguistic courses were in almost all cases irrelevant to the classroom teacher. This cycle of irrelevance must now be broken.

Before discussing how this might be done we must first look at what a teacher needs to be and do. There are of course many students of linguistics who will not end up as language teachers or therapists. One must therefore ask if their needs are different from the needs of those who will be trying to apply their new skills to the solving of language problems among different types of learners? I myself am inclined to the view that we have here two different groups with rather different objectives while one would agree that they should all be well grounded in disciplines within linguistics - it is not clear to what extent the study of such disciplines should continue. Since my own bias is towards the influence linguistics training should have on language teachers, in its broadest sense, I would like now to list certain requirements that teachers must have if they are to have any success as professionals and practitioners in their own jobs. The requirements given below would be expected of the teacher of English.

Language Skills:

- (i) The teacher must be a good model of English speech.
- (ii) He/She must be thoroughly conversant with modern English usage.
- (iii) He/She must also be aware, through his/her own experience of the potential difficulty (phonological, grammatical etc.) for the

learners in his/her classroom.

Professional Skills:

- (i) The teacher should understand the principles that lie behind the preparation of language-teaching syllabuses.
- (ii) He/She should be familiar with the various methods and techniques of classroom presentation and the rationale behind them. The teacher should also be able to modify and supplement material according to the needs of the class.
- (iii) He/She must be familiar with current developments in language teaching and language learning theories and should be properly critical of claims made by their advocates.

Evaluation of Linguistic Influence on Language Teaching:

With the preceding remarks about the Language and Professional skills that should be required of teachers, let us look at what "linguistics" has achieved:

Recent statements point to a growing gulf between linguistics and language teaching and to a cautious evaluation of the desirable relationship that should exist between the two fields.

- Wardhaugh - 1972 TESOL Convention - "... that the current preoccupations of theoretical linguists have little if any relevance to language teaching."
- Bolinger talks about - "organized intervention of linguistics" and fears that current linguistic theory may finally turn language teachers away from linguistics as a source discipline.
- Selinker in his paper - "State of the Art" says that to have Linguistics as the sole basis of a theory of language teaching is a discredited hypothesis because many of the problems central to language teaching are of no relevance to current theoretical pre-occupations in linguistics. Linguistics is also in an uncertain state of development marked by constant dispute and doubt.

It has often been remarked that "What is valid in linguistic theory must also be valid in language teaching". This is a dangerous hypothesis and a great deal of valuable and sensitive work has been marred by the tacit acceptance of such a view.

Any discipline can be made to seem relevant to foreign language teaching. One can find applications and implications in many fields - cognitive psychology, speech perception, anthropology, sociology and a whole host of others.

The jump from theory to practice, from a principle to its application is no easy one. An oversimplified interpretation of theory and a facile expectation that theoretical constructs must find similar counterparts in an applied field such as language teaching, destroys the independence of the two disciplines.

What linguistics hasn't achieved:

One can summarize here by saying that failure is evident in **two** main areas:

- (i) The content of pedagogical grammars, and
- (ii) The attitude of teachers.

The Teacher as a Model of English speech.

Here, the study of linguistics should aim to help to improve the teacher's own language performance and his performance as a teacher. When one observes current speech closely one often discovers that the facts are very different from what they are popularly held to be. Many students need considerable re-education in the area in order to disabuse them of wrong ideas of correctness and to clarify for them the relative status of pronunciation in general for intelligibility as compared with the importance of correct stress, rhythm and intonation. A fresh look at the phonology (the sound system) of English, through linguistics can thus be invaluable in its effect on the student's attitude to his own speech. This of course does not mean telling the students that his own speech is seriously deficient in certain respects. Instead through an 'objective' study of the facts the student is able to recognise the truth for himself.

Cross reference can be made to method, to explain why certain contrasts are relatively unimportant and why improvement is so essential in other areas, i.e. rhythm and stress. The student, therefore, who is well equipped with the metalanguage of linguistics, will be better able to think about and discuss technical problems related to learning and teaching speech. Such a student should know immediately where the fault lies and should go about finding a remedy. The teacher not trained in linguistics will not be able to detect or discuss in a technical way why certain errors occur in both the sound system and in the grammar.

In the study of word formation and meaning, the insights provided by the linguistics course can be related to the problems of language learning for example, the inefficiency of decontextualized word-lists, the rationale for maximizing exposure through reading, the interrelation between words and structure. In the study of syntax (the various possible orderings that can occur in language) the aim should be to make him aware that grammar is essentially an account of the structural possibilities of various concepts related to communicative purpose. In this case cross-reference will be to the uses of transformations (rearranging word order) in learning new language patterns or in explaining ambiguities or errors. The study of syntactic possibilities can be linked to the principles of selection and grading involved in syllabus-construction.

It is true to say of course that the selection and grading of materials are rarely the responsibility of the classroom teacher; however, an understanding of the principles applied by the materials producer should help the teacher in his preparation of supplementary materials.

One of the most fruitful areas of language study at the moment is child language and the strategies used by children in acquiring their mother tongue. This is something which is not accomplished in one whole swoop but is built up bit by bit through exposure in many different situations. Language learning is seen clearly as a hypotheses testing one, by which the child accumulates knowledge about the structures acceptable in adult speech, and

in this way he makes the final breakthrough to fluency. The teacher should also be aware of the various techniques of testing and the theory behind them. He should be aware of the use of transforms in testing, in the construction of drills etc.

The aim of all this is to make the student/teacher aware of what is going on and why, in the language teaching profession, and to enable him to read intelligibly on his own.

What we need then is a broad course in linguistics to suit diverse interests as a beginning point. This should cover the areas of phonology, syntax, semantics, pragmatics, social usage etc., sociolinguistics, psycholinguistics etc. from a theoretical point of view. This should be followed by particular courses geared towards the needs of particular students. These latter courses would be of an applied nature and would cover among other things the following topics:

- | | |
|---|--|
| (i) Language Acquisition/Learning. | - L ₁ & L ₂ acquisition/learning. The course should cover all the linguistic, social and psychological problems that obtain in such circumstances. This would include the study of Interlanguage, language usage among different learners, immersion programmes, development of the brain, periods of language learning etc. |
| (ii) Syllabus Design, Curriculum Development and Methodology. | - Type and content of teaching materials etc. - order and presentation. The theories that lie behind the preparation of such materials and the methodology used. |
| (iii) Testing and Learning Objectives. | - The importance of objectives in language teaching. Different types of tests and the advantages and disadvantages associated with them. |
| (iv) Contrastive/Error Analyses of different languages. | - This course would build on the information given in the broad course in linguistics - the study of phonology, syntax, pragmatics, social usage etc. |
| (v) Language Change. | - Normal developments in language change - simplification of language structure etc. |

/....

We should now contemplate the words of one famous linguist M.A.K. Halliday (1970) when he says "Replacing good teachers with no linguistic knowledge by teachers trained in linguistics does not of itself make much difference to the effectiveness of the language teaching taking place..... the place for both phonetics and linguistics is behind the language teacher, in the training he received for his job as a teacher, in the preparation of the syllabus according to which his teaching programme is organised, and in the preparation of the teaching materials of all kinds that he makes use of in class". And that is precisely why teachers should be familiar with linguistics with special reference to the topics discussed above.

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LINGUISTICS AND CURRICULUM DEVELOPMENT
AT THIRD LEVEL

D.G.Little

My concern in this paper is not with linguistics as an academic discipline or a subject of academic study, but with the contributions that various areas of linguistics should be making to the development of courses and teaching at third level. No doubt one could argue plausibly that the insights of linguistics are relevant to many third-level courses in both arts and science. But talk of linguistics in a university, especially if that university has no linguistics department, will tend to focus on the language-and-literature departments. They are my focus too. It is my contention that the teaching of literature, the definition of language teaching syllabuses, and the development of language teaching materials and methodology ignore at their peril what linguistics in one form or another has to tell them.

It is hardly news that in the English-speaking world during the past two decades linguistics and literary studies have not always been on good terms with one another. If one reads some of the disputes between linguistic and literary scholars, for example the one between Roger Fowler and F.W. Bateson reprinted in Fowler's The languages of literature (1971), it is often difficult to see what exactly the source of conflict is; and tempting to conclude that much of it derives from prejudice and incomprehension - at any rate on the side of the literary traditionalists. But the fact is that the medium of literature is language. To the extent that it is not to be merely a branch of philosophy or theology or sociology or social history or the history of ideas, literary study must concern itself with the linguistic means by which literary effects are achieved. Modern language departments are appealing to this fact when they insist that their students must read French novels in French, German poetry in German, and so on. It is important not to overstate the case, of course - there is a great deal more to literary studies than linguistics can possibly encompass; yet a core linguistic element is inescapable. The situation has been stated with perfect clarity by M.A.K.Halliday (1966, p.67):

Linguistics is not and will never be the whole of literary analysis, and only the literary analyst - not the linguist - can determine the place of linguistics in literary studies. But if a text is to be described at all, then it should be described properly; and this means by the theories and methods developed in linguistics, the subject whose task is precisely to show how language works.

If an undergraduate's literary studies are to be first-hand, involving more than the assimilation and reproduction of what others have thought before him, he must be equipped to describe and analyse literary works as text and as discourse. In other words, he must be able to relate the way in which they work to the way in which the language works in normal social (i.e. non-literary) communication. A careful linguistic description of a text should act negatively as a check on wild speculation but also positively as the first step in the exploration of the text's meaning. Halliday's analyses of the use of the definite article in Yeats's poem "Leda and the Swan" (1966) and of the linguistic means used by William Golding in The Inheritors to suggest the thought processes of Neanderthal man (1971)

are models of what can be achieved.

It is true that many literary courses these days contain an element of practical criticism, whether it is called by that or some other name, such as textual analysis. But how many graduates of literary courses have been thoroughly equipped with the basic tools I am talking about? In my experience very few. It is not of course necessary for undergraduates taking literary courses to be acquainted at first hand with the theories and methods developed in linguistics, but it is necessary for them to be able to describe how language works. Excellent primers exist which can be used to give a basic linguistic orientation to courses in textual description and analysis - for example Geoffrey Leech's A linguistic guide to English poetry (1969) or H.G. Widdowson's Stylistics and the teaching of literature (1975) or Anne Cluysenaar's Introduction to literary stylistics (1976).

I am convinced that if descriptive linguistics were permitted to make a more explicit contribution to literary courses, these courses would show a significant gain in intellectual discipline. Teachers and examiners would read fewer effusions masquerading as analyses, fewer statements of the student's mental state and emotional prejudices claiming the status of criticism. I cannot pretend, however, to know how to bring this transformation about in practical as opposed to theoretical terms. For the prejudice against linguistics among literary scholars remains as strong now as at any time in the past twenty years; just how strong is shown by the fact that the current conflict in the Cambridge English Faculty between traditional empirical criticism on the one hand and structuralist and post-structuralist poetics on the other has been widely represented as literary scholarship once more resisting the incursions of linguistics.

If linguistics can make a direct contribution to literary study at university, helping to provide the student with tools of description and analysis, its contribution to language teaching is indirect and behind the scenes. Language teaching has long been acknowledged as a problem by teachers and students in modern language departments. The problem has presented itself in various guises. The traditional exercises (prose, unseen and essay) have been declared unsuitable vehicles for language teaching; students have demanded more "relevant" language teaching; it has been thought desirable that students should attain greater fluency in the spoken language; language teaching has been seen to be divorced from the rest of the modern language course. But however the problem has been presented, its root cause remains the same: there is no language teaching syllabus for modern language courses, no clear statement of what the aims and content of language teaching should be.

In recent years there has been a great deal of interest in the problem of defining language teaching syllabuses for adult learners and schoolchildren. Perhaps the chief stimulus has been the idea of "communicative competence", which was developed in opposition to Chomsky's distinction between "competence" and "performance" (see for example Chomsky 1965 and Hymes 1971). Work in speech act theory and linguistic pragmatics has provided categories of definition and description. The idea of communicative competence focuses on language as a medium of communication rather than as a system of rules for

generating sentences; its implication for language teaching syllabuses may be summarized as follows.

If the aim of language teaching is to enable the learner to communicate, what is taught will depend on the kind and range of communication that the learner is to achieve. Thus the first step in syllabus definition must be to describe in general terms the minimum linguistic behaviour that the learner should be capable of - the tasks he should be able to perform in the foreign language and the meanings he should be able to convey. Once this has been done, it is possible to attempt a fuller and more precise definition of the concepts to be communicated and the purposes and contexts of communication. The Skeleton Syllabus devised by I.T.E.'s Modern Languages Syllabus Project for Post-Primary Schools (revised version, 1980) provides a ready example of such a definition. It specifies the minimum linguistic content of the post-primary syllabus in terms of communicative functions, general notions, topics (specific notions), and situations.

There is no reason why the same principles of syllabus definition should not be applied to the language teaching component of university courses in modern languages. In order to draw up a general behavioural specification it is necessary first to know what the course is about. Modern language courses draw predominantly on the disciplines of literary and linguistic study. The corpus of language and literature which forms the basis of each course must be given precise definition, bearing in mind that an undergraduate course cannot possibly cover all of a language and its literature except by a series of evasions (see Little 1976). From here it is possible to proceed to some such broad behavioural specification as the following: "Students will be expected to understand, by reading or listening, the corpus of language which is the object of their linguistic and literary study. They will be taught to use the foreign language as a vehicle for the analysis and discussion of literary and linguistic texts and problems." And from here one could go on to specify in detail the minimum productive competence that the student should attain in the language. Modern language departments might shrink from binding themselves to such a specification, but there is no doubt that it would provide useful guidance for teachers, students, and examiners. Equally there can be no doubt that a language teaching syllabus of this kind would do much to remove the uncertainty as to aim that characterizes so much language teaching in modern language departments.

However, it is one thing to define the language learner's aims, quite another to arrive at a satisfactory methodology for fulfilling those aims. A great deal more will have to be known about the processes of language acquisition before our methodology and learning materials can be developed with total confidence. Nevertheless, some of the central insights of recent linguistics can at least offer guidance. To take perhaps the most obvious example, Chomsky's discrediting of Skinner's behaviourist theory of language acquisition as a process of habit formation has implications for the input/output theory that underlies audiolingualism: the theory that our teaching puts a given quantity of language into the learner and in due course extracts the same quantity of language. As common sense already tells us, our receptive competence in any language will always be greater than our productive competence. Some of the best recent language teaching

materials recognize this fact quite explicitly. For example, each unit in the Langenscheidt course Deutsch aktiv for adult learners begins with a text (printed or spoken) which is both authentic and beyond the learner's power to produce. The unit proceeds by analysing the text in various ways and thus providing the learner with the means of reconstituting for himself at least some of the text's meaning.

This approach might be adopted in the development of language teaching materials for traditional language-and-literature courses at third level. A teaching unit in a French course might consist of a passage of French literary criticism, analytical exercises designed to lay bare the structure of French literary critical discourse, extension exercises that teach different ways of conveying a given range of meaning, and a creative exercise that requires the learner himself to invent a few paragraphs of French literary criticism. Here as in so many other areas of language teaching there is much to be learnt from developments in the teaching of English as a second language. An excellent illustration of the kind of teaching materials I have in mind is provided by the English in Focus series (Oxford University Press), which is concerned with the teaching of English for a variety of academic purposes. Certainly materials of this kind would make a great deal more sense to most students than prose composition, which in any case is founded on the false assumption that the student can produce the foreign language at the same level and in the same range as he can receive his own language.

I have spoken somewhat skeletally of three areas in which I believe the insights of linguistics can make a significant contribution to the development of curriculum and teaching. My motive for choosing these three areas was not simply that linguistics is commonly thought of in relation to language-and-literature departments. I believe that linguistics insights provide the means of integrating the customarily disparate elements of modern language courses. Literary study that is in part founded on linguistic description is also linguistic study; and language teaching whose content is defined in relation to literary study and which proceeds from analysis through reconstruction to creation, is closely akin to literary study. Clearly there is room here for a major effort of curriculum development; though I do not expect it to be an easy task to persuade my modern language colleagues.

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